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NEW METHODS FOR MEASURING THE DEVELOPMENT OF ATTITUDES IN CHILDREN.

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STRUCTURAL (NONCONTENT) DIMENSIONS OF CHILDREN'S POLITICAL ATTITUDES AND THEIR DEVELOPMENT WERE INVESTIGATED USING NEW METHODS DERIVED FROM SELF-REPORT DATA. THE CONSTRUCT, "ATTITUDE-CONCEPT SYSTEM," WAS INTRODUCED TO DESIGNATE EVALUATIONS OF AN ATTITUDE OBJECT AND BELIEFS ASSOCIATED WITH THIS EVALUATION. THE FIVE STRUCTURAL DIMENSIONS CHOSEN FOR THIS STUDY WERE (1) EXTENSIVENESS, OR THE NUMBER OF ATTITUDES A CHILD CAN EXPRESS, (2) CONSISTENCY BETWEEN EVALUATIONS OF AN ATTITUDE OBJECT AND BELIEFS ABOUT THAT OBJECT, (3) ATTRIBUTE DIFFERENTIATION, OR THE INDEPENDENCE OF JUDGMENTS OF PERSONAL AFFECTION FROM JUDGMENTS OF ROLE PERFORMANCE AND POWER, (4) OBJECT DIFFERENTIATION, OR THE ABILITY TO DIFFERENTIATE BETWEEN POLITICAL AND FAMILY AUTHORITY FIGURES ON AFFECTIVE QUALITIES, AND (5) STABILITY OF ATTITUDE RESPONSES. HOUR-LONG QUESTIONNAIRES CONCERNING POLITICAL ATTITUDES WERE OBTAINED FROM APPROXIMATELY 12,000 CHILDREN, GRADES 2 THROUGH 8. THE RESULTS SUPPORT THE IMPORTANCE OF STRUCTURAL DIMENSIONS OF ATTITUDE-CONCEPT SYSTEMS FOR UNDERSTANDING CHILDREN'S SOCIAL ATTITUDES. (GD)

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NEW METHODS FOR MEASURING THE DEVELOPMENT OF ATTITUDES IN CHILDREN

Cooperative Research Project No. S-209

Judith V. Torney (Initiator)
Robert D. Hess (Sponsor)

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TABLE OF CONTENTS

Page

ACKNOWLEDGMENTS ii

LIST OF TABLES vi

Chapter

I. BACKGROUND AND HYPOTHESES 1

Introduction and Problem
Conceptual Framework
  Attitudes, Concepts and Attitude-Concept Systems
  The Development of Children's Attitude-Concept Systems
  Structural Dimensions of Attitude-Concept Systems and Their Development
  Measurement Problems in Attitude Research
Questions and Hypotheses
  Relationships Between Structural Dimensions
  Attitude Structure and Test Taking Experience
  Structural Dimensions and School Grade Level
  Structural Dimensions and IQ
  Sex Difference in Structural Dimensions
  Structural Dimensions and Political Involvement

II. SOURCE OF DATA AND SCORING PROCEDURES 31

Source of Data
Independent Variables
  Grade
  Intelligence
  Political Involvement
Derived Variables
  Content Areas
  Derived Variables as Measures of Structural Dimensions
  Scoring of Derived Variables

III. RESULTS AND CONCLUSIONS 45

Introduction
Relationships Between Structural Dimensions
  Relationship Between Subscores in Different Content Areas on the Same Structural Dimension
  Relationship Between Subscores in the Same Content Area Assessing Different Structural Dimensions

TABLE OF CONTENTS--Continued

Chapter Page

Conclusions About the Relationships Between Structural Dimensions
Attitude Structure and Experience
The Relationship Between Structural Dimensions and Grade, Intelligence and Sex
Extensiveness
Stability
Object Differentiation in Judgments of Political and Non-political Authority Figures
Differentiation and Consistency in Attitudes Toward Political Parties
The Relationship Between Selected Structural Dimensions and Political Involvement

IV. SUMMARY 117

Problem
Method
Results
Relationships Between Dimensions
Structure and Test Taking Experience
Relationship to Grade
Relationship to Intelligence
Sex Differences
Political Involvement and Structure
Conclusions
The Characteristics of Structural Dimensions
The Development of Structural Dimensions During Elementary School
Correlates of Attitude Structure in Children
Structural Dimensions of Particular Attitude-Concept Systems
Derived Variables, Structural Dimensions, and Measurement

APPENDIX
A. ITEMS USED IN SCORING DERIVED VARIABLES 139

Image of Parties' Stands Items
General Attitudes Toward Party Items
Influence on the Government Items
Concept of Democracy Items
Efficacy Items
Additional Items Used in Total DK-Grade 3 and Total DK-Grade 4
Items Used to Measure Response to 1960 Election
Items Used in Measure of Political Involvement
Rating Scales for Figures

BIBLIOGRAPHY 147

LIST OF TABLES

Table Page

1. Correlations Between DK Scores and Stability Scores 47

2. Correlations Between Stability Scores for Figures 49

3. Correlations Between Instability Scores for Figures 50

4. Correlations Between Attribute Differentiation Scores for Different Figures 51

5. Summary of Relationship Between Concept of Democracy Don't Know Score and Concept of Democracy Stability Score 54

6. Summary of Relationship Between Efficacy Don't Know Score and Efficacy Stability Score 55

7. Summary of Relationship Between Image of Parties' Stands Don't Know Score and Image of Parties' Stands Stability Score 56

8. Summary of Relationship Between Influence on Government Don't Know Score and Influence on Government Stability Score 57

9. Correlations Between Items Concerning Political Partisanship 60

10. Comparison of Mean Scores on Test 1 and Test 2 65

11. Analysis of Variance of Concept of Democracy Don't Know, by Grade, Intelligence, and Sex 68

12. Analysis of Variance of Image of Parties' Stands Don't Know, by Grade, Intelligence, and Sex 69

13. Analysis of Variance of Efficacy Don't Know, by Grade, Intelligence, and Sex 70

14. Analysis of Variance of General Party Don't Know, by Grade, Intelligence, and Sex 71

15. Analysis of Variance of Influence on Government Don't Know, by Grade, Intelligence, and Sex 72

LIST OF TABLES--Continued

Table Page

16. Analysis of Variance of Total Don't Know, by Grade, Intelligence, and Sex 74

17. Changes by Grade in Distribution of Typologies of Democracy Stability and Extensiveness 76

18. Changes by Grade in Distribution of Typologies of Image of Parties' Stands Stability and Extensiveness . . . 76

19. Analysis of Variance of Rescored Stability of Concept of Democracy Scores, by Grade, Intelligence, and Sex . . . 79

20. Analysis of Variance of Rescored Stability of Efficacy Items, by Grade, Intelligence, and Sex 80

21. Analysis of Variance of Stability of Own Partisan Affiliation, by Grade, Intelligence, and Sex 81

22. Analysis of Variance of Rescored Stability of Image of Parties' Stands Items, by Grade, Intelligence, and Sex . . . 82

23. Analysis of Variance of Rescored Stability of Influence of Government Items, by Grade, Intelligence, and Sex . . . 83

24. Analysis of Variance of Stability of Non-family Authority Items, by Grade, Intelligence, and Sex 86

25. Analysis of Variance of Instability of President Items, by Grade, Intelligence, and Sex 87

26. Analysis of Variance of Instability of Father Items, by Grade, Intelligence, and Sex 88

27. Analysis of Variance of Instability of Policeman Items, by Grade, Intelligence, and Sex 89

28. Analysis of Variance of President-Father Differentiation on Favorite, by Grade, Intelligence, and Sex 92

29. Analysis of Variance of President-Father Differentiation on Helps, by Grade, Intelligence, and Sex 93

30. Analysis of Variance of Differentiation of Role from Affiliation for President, by Grade, Intelligence, and Sex 95

31. Analysis of Variance of Differentiation of Power from Affiliation for President, by Grade, Intelligence and Sex 96

LIST OF TABLES--Continued

Table | Page

32. Analysis of Variance of Differentiation of Role from Affiliation for Policeman, by Grade, Intelligence, and Sex 98

33. Analysis of Variance of Differentiation of Power from Affiliation for Policeman, by Grade, Intelligence, and Sex 99

34. Analysis of Variance of Differentiation of Role from Affiliation for Father, by Grade, Intelligence, and Sex 100

35. Analysis of Variance of Differentiation of Power from Affiliation for Father, by Grade, Intelligence, and Sex 101

36. Analysis of Variance of Consistency of Party Affiliation and Response to Election, by Grade, Intelligence and Sex 104

37. Analysis of Variance of Party Non-differentiation, by Grade, Intelligence, and Sex 106

38. Analysis of Variance of Consistency of Party Affiliation and Party Stands, by Grade, Intelligence, and Sex 107

39. Development of Norms of Adult Partisan Independence and One's Own Party Affiliation 109

40. Correlations by Grade Between Political Involvement and Extensiveness with IQ Partialed Out 112

41. Analysis of Variance of Three Instability Scores by Political Involvement (Eliminating Effects of Intelligence and Grade) 114

42. Analysis of Variance of Partisan Differentiation and Consistency by Political Involvement (Eliminating Effects of Intelligence and Grade) 115

43. Summary of Results 124

CHAPTER I

BACKGROUND AND HYPOTHESES

Introduction and Problem

Models and methods used in studying the attitudes and opinions of adults are inadequate when applied to children's attitudes. Children are completely lacking information in some attitude areas; children's attitudes change rapidly as they acquire additional experience; children's attitudes are integrated with their immature cognitive structure; children use language in ways that differ from adult usage. This makes it particularly difficult to utilize models and methods formulated to assess adult attitudes for studies of children.

This insufficient methodology has been one reason for the limited study of children's attitudes in areas other than race prejudice. Goodman, Busioka, and Matsuura (1956) reported that in a bibliography of 1,331 references covering personal and social development, the only studies which focused on social concepts or attitudes dealt with in-group/out-group relations. Investigators who have explored children's prejudice have been interested in determining the positive or negative character of attitudes (their content) rather than in understanding the process by which attitudes are acquired and subsequently change. Although studies in this field, such as that by Horowitz and Horowitz (1937), have given useful information about specific attitudes and concepts, they have made limited contributions to understanding the process of attitude development and to providing methodology useful in other content areas.

Studies of children's attitudes have not been integrated with contemporary research into cognitive development. The growth and organization of children's social attitudes and concepts could usefully be approached using some of the constructs from recent research in cognitive development. Accordingly, this research has conceptualized development as change in the quality and structure of thought and behavior, rather than as change in the amount of some trait or ability. Utilizing this orientation toward children's attitudes, new methods for measuring the structural (non-content) dimensions of political attitudes have been derived from self report data.

Conceptual Framework

Attitudes, Concepts, and Attitude-Concept Systems

Before discussing structural dimensions of attitudes, it is useful to briefly review the traditional definitions of attitudes and concepts, the type of research which has been done using these constructs, and the conceptualization of "attitude-concept system" which has been adopted for this research.

The term "social attitude" has been used primarily by social psychologists, Allport's definition of attitude being cited by almost all investigators:

> . . . a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related. (Allport, 1935, p. 180.)

A definition which makes more explicit the relationship between the components of an attitude has been proposed by Krech and Crutchfield, who defined attitude as "an enduring organization of motivational, emotional, perceptual, and cognitive processes with respect to some aspect of the individual's world"

(Krech and Crutchfield, 1948, p. 152). Campbell's operational definition of attitude also stressed the consistency of attitude responses: "An individual's social attitude is a syndrome of response consistency with regard to social objects" (Campbell, 1950, p. 30). The major concern of social psychologists operating within these definitions, however, has been to measure more accurately the direction of an attitude (Thurstone and Chave, 1929, and many others following) and to discover ways of experimentally producing change in attitudes (Janis and Hovland, 1959).

Social concepts, in contrast, have been studied primarily by educators and developmental psychologists. Thirty years ago. educators tried to determine which kinds of curriculum units in civics increased the number of children who could correctly define social concepts such as democracy (Burton, 1936; Kelley and Krey, 1934). More recent research by developmental psychologists has been based on social concepts as Piaget defined them (Kohlberg, 1961, 1963, 1965). Some definitions of "concept" are similar to the definitions of "attitude." Russell (1956) defined both as states of readiness to respond to stimuli, pointing out that concepts are based on knowledge while attitudes have their source in emotional experience.

Many discussions distinguish two components of attitude--evaluations of the attitude object (affective orientations toward it) and beliefs or judgments about the object (Chein, 1951; Fishbein, 1963; Katz and Stotland, 1959; Osgood, 1962; Peak, 1958; Rosenberg, 1960; Smith, Bruner, and White, 1956). Evaluations are statements of worth or valuing of an object, usually on a dimension of good-bad or pleasant-unpleasant. They imply the individual's desire to approach or avoid the attitude object. Beliefs are judgments about an attitude object which are neutral and do not contain explicit valuing or expressions of desire to approach or avoid (Krech and Crutchfield, 1948).

In this research report the term "attitude-concept system" refers to the cluster of evaluations and beliefs organized around an attitude object. Attitude objects, which are visualized as the focal points of these systems, may be of a number of levels of generality. Persons (including the self) are the most easily specified objects. Social structures (e.g., the government) are more general and may be concretely symbolized differently by different respondents. Ideologies (e.g., democracy) and social processes (e.g., the process by which citizens influence the government) are the most abstract attitude objects. Investigators of attitudes usually specify (either explicitly or implicitly) attitude objects in which they are interested and they frequently group them on a rational basis. The use of "attitude-concept system" in this research suggests that it is possible to distinguish a number of concepts (beliefs) and evaluations concerning any attitude object (defined by the researcher) and it is useful to investigate the relationship of these attitude elements to each other.

Most investigators, however, have dealt only with the content of these elements (the positiveness or negativeness of evaluations and the specific content of beliefs). Closely related to the study of content has been the study of attitude intensity--the strength of an affective or evaluative feeling; an attitude may be very positive or less positive. Guttman (1954), for example, determined which opinions were most extreme by calculating the amount of deviation from the central point on an attitude scale.

Elements of attitude-concept systems are also organized with respect to each other. These relationships have frequently been discussed using the construct structure. Garner (1962), an information theorist, defined structure as the totality of quantifiable relationships between events which comprise a system. Rosenberg (1960) defined a structure as constellation of component events or processes related to one another so that alteration in one produces changes in others. In this research report, structure refers to the organization of evaluations and beliefs within an attitude-concept system and to characteristics of these elements other than content and intensity.

The Development of Children's Attitude-Concept Systems

The process of the acquisition and development of attitudes has been the subject of extensive speculation but of little research. Allport (1935), one of the first to consider this problem, discussed four types of attitude genesis: (1) the integration of responses of a similar type, implying that attitudes are pieced together from previously unrelated responses, (2) differentiation of a specific attitude from the "coarse, diffuse and non-specific" matrix of attitudes, (3) the organization of affects following an intense emotional experience, (4) the imitation of attitudes of parents, teachers, or playmates.

In the research reported here, the assumption has been made that attitude development begins with the evaluation of the attitude object. There are several ways in which this evaluation may be made: first, the child may directly relate the object to needs or evaluative standards he has already established; second, the evaluation may be generalized from evaluation of a similar object (the incorporation of a new object into an already formed system and the transfer of feelings from the old object to the new, e.g., evaluating the President as one evaluates one's own father); third, the child may take over some model's evaluation of the object (e.g., becoming a Democrat because his parents are Democrats). Other writers, particularly Harris (1950), Lee and Lee (1958), and Russell (1956), suggested that children's early attitudes are limited to the general and primitive categories of good and bad.

Later these attitudes become reinforced and consolidated by the selective learning of beliefs congruent with these early evaluations. Rosenberg (1956), whose theory of attitude change depends upon this kind of consistency, stated this more directly:

> . . . much original attitudinal learning (the acquisition of a stable affective response where none existed previously) may originate in experiences of being rewarded or punished for imitation or rehearsal of affect provided by others. . . . With an affect . . . established through reinforcement procedures something like a need for affective-cognitive consistency may set the person to acquire socially available beliefs that "rationalize" the acquired affect. . . . Where attitudes are being instilled, there are generally available both cognitive supports for the advocated affect and direct reinforcements for its expression. (Rosenberg, 1956, p. 371.)

Processes of attitude development and modification other than imitation or learning have been explored in a number of discussions of the process of concept formation. Some of these are particularly relevant to the structural dimensions with which this research is concerned. As Vinacke (1954) has suggested, concepts may develop not only through explicit instruction but also through implicit exploration performed either covertly or overtly by the individual. Logical manipulation and increased familiarity contribute to both the stability and the organization of attitude-concept systems in the older child. Kohlberg has summarized this point of view as follows: ". . . thought organization depends upon experience for its *development* but does not preserve the effects of experience in the form of specific responses" (Kohlberg, 1961, pp. 174-75).

Structural Dimensions of Attitude-Concept Systems and Their Development

This research is particularly concerned with the structural dimensions of children's attitude-concept systems. Five non-content dimensions of attitude were chosen, because of their relationship to concepts used in recent research on cognitive development and because of their importance in the few studies which have systematically considered dimensions of adult attitudes other than content and intensity.

Extensiveness

The dimension of extensiveness has not been considered systematically by many investigators in studying the attitudes of adults, but it is particularly important in a study of children's attitudes. Sherif and Cantril (1945) presented a rationale for this dimension. The subject-object relationships which characterize social attitudes are not innate. Very young children have no information about and no formed attitude toward most attitude objects. Perceptual contact with an object or some verbal representation of it is necessary before one may usefully speak of an attitude at all.

An example of the use of the dimension of extensiveness is the work of Oeser and Emery (1954); they used the failure of children to respond at all to a question as indicative of a lack of beliefs with respect to that topic. This index of the absorption by the child of the group ideology was associated with age. They also found that in some content areas ideology was absorbed early, in others late. For example, perceptions of the social groups that further one's interest occurred before absorption of beliefs about social groups which act against one's interests. The relationship between number of attitudes expressed and integration into a social system has also been explored by Erbe (1961).

An adult's inability to express an opinion on a given topic when approached by an interviewer has also been recognized as a measure of uncrystallized opinion (Katz, 1940; Remmers and Radler, 1957). The most obvious reason for a "no opinion" response is a lack of information about the subject of the questions (ignorance). The second is lack of conviction or personal involvement with the issues represented in the question--indifference or indecision (Campbell, Converse, Miller, and Stokes, 1960; Katz, 1940; Key, 1961; Zeisel, 1957). The motivating function of evaluation in acquiring congruent information and the frequency with which people are willing to express opinions when they lack the ability to justify these opinions with relevant information has been pointed out by Hyman and Sheatsley (1947). A number of authors have reported that questions involving personal morality and general political norms receive fewer "Don't Know" responses than questions which demand specific information about government policies or actions (Britton, 1947; Campbell et al., 1960).[1]

In this research, "Don't Know" responses are assumed to reflect the absence of evaluation or beliefs in a given attitude-concept system. This structural dimension of extensiveness represents the number of beliefs, the elaboration of evaluations, and the number of ways in which an attitude object has been related to the self and to other objects.

Stability

The importance of stability as a structural dimension of attitude follows from a recent set of publications. Fiske formulated response stability in a broader context of behavior relating it to attitude intensity: "The stronger the predominant response tendency of the organism in a particular situation, the lower the variability of its responses" (Fiske, 1961, p. 332).

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[1] A third type of "don't know" is the "evasive Don't Know." The absence of a response may be explained by the discomfort which it would arouse. (Gold, 1955; Zeisel, 1957.) Berelson, Lazarsfeld, and McPhee (1954) reported that partisans who themselves took a different position on issues from that of their candidate were more likely to say that they did not know what their candidate's position was on this issue.

Early conceptions of reliability or stability equated unreliability and error (Spearman, 1907). The next development historically was the conceptualization of function fluctuation (Brown and Thomson, 1940; Paulson, 1931; Thouless, 1936). These authors pointed out that the failure of test-retest correlations to reach unity could be due to actual changes over time in the function being measured. They also pointed out that these changes were not necessarily uncorrelated with each other and, therefore, did not meet Spearman's criterion as error variance.

Fagin (1950) proposed the existence of individual differences in variability. By showing that the number of items where responses were changed (on odd-numbered and on even-numbered test items) on a behavior rating scale and on an interest inventory was correlated positively (rather than uncorrelated as the error formulation specified), he demonstrated variability to be a behaviorally significant individual characteristic.

In a study of much larger scope, Fiske and his associates concluded that although variability of responses on different occasions was not a trait, individual differences in this characteristic were reliable (by Kuder-Richardson criteria) in groups of relatively homogeneous items over more than two occasions (Fiske, 1957; Mitra and Fiske, 1956). This type of intra-individual variability is similar to concepts in other behavior and learning theories, such as Hull's "behavioral oscillation" and Estes' stimulus and response variability (Fiske and Rice, 1955).

The type of item which is responded to in the most stable fashion and the interaction between the item and the subject in producing stability were also investigated by Fiske. The more structured a test is for an individual, the higher the stability of his responses. Structure is a product of the test (its number of alternatives, its instructions) and the individual. For example, individuals who gave many common responses showed less variability than individuals giving many unique responses (Fiske, 1957; Osterweil and Fiske, 1956). Glaser (1949) reported that on ability and achievement tests persons were more likely to change responses which were near the threshold of difficulty. Cattell's work (cited by Fiske and Rice, 1955) demonstrated that variability is associated with an individual's tendency to give extreme responses, though individuals who place most of their ratings in the center of the scale do not change the extreme responses that they do give any more than they change the less extreme responses.

Others identified the content of items which are most stable. Cattell (1943) reported that over a one-month retest period, using agroup of children, the mean number of response units changed was greatest for superficial attitudes and least for items dealing with self concept. Darley (1938) in a survey of college students over a one-year period reported that opinions "recently arrived at in regard to objects of remote connection to the self" were least stable, while self evaluations and personality traits were most stable.

Given these characteristics of stable items, what kinds of individuals are most likely to give stable responses? Cattell (1943) reported that low fluctuation was associated with a character integration factor. Conscientiousness, dependability, perseverance, and energy were other trait names he associated with this ability. He inferred from a low correlation between fluctuation and a test of memory that memory was not an important factor in stability of response. Cummings (1939) reported that high variability on self ratings was associated negatively with persistence. Brogden (1940) found that nonvariability among thirty trials on addition was highly loaded on a factor with ability to work steadily and resist distraction.

Several authors reported that the giving of stable responses increases with age. Over both a one-day and a one-month retest period, children changed more response units (proportional to the number of items) than adults (Cattell, 1943). The unfamiliarity of children with political objects and the rapid acquisition of political orientations during elementary school have been recently documented (Hess and Torney, 1965). Analogously, in the developmental literature, the lability of behavior which is growing or being acquired has been commented upon by Escalona and Heider (1959) and by Bayley (1949). Characteristics such as persistence, which have been associated with response stability, increase with age (Ryans, 1939). The developmental decline in unstable, unique, and idiosyncratic word meanings and the increase in conventional and invariate use of language have been documented by Werner and Kaplan (1950). Clearly all factors associated with increasing response stability are increasing during the elementary school years.

Consistency

The dimension of consistency has received a considerable amount of attention in the literature--congruity-incongruity studied by Osgood and Tannenbaum (1955), balance-imbalance proposed by Heider (1946), and consonance-dissonance used by Festinger (1957). Osgood and Tannenbaum (1955) in particular stressed the pressure toward simple all-or-none judgments on an evaluative continuum. Zajonc (1960), summarizing these studies, pointed out that all such concepts of consistency assume rational individuals who attempt to appear consistent to themselves; all these theories hypothesize that the individual will strive to return structures which are inconsistent, incongruous, imbalanced, or dissonant to a more consistent state.

The purpose of many conceptualizations of consistency has been to account for motivational pressure to change attitudes. Hardyck (1962), using the dissonance framework, reported that subjects with internally consistent belief systems changed least after exposure to persuasive communication. A conceptualization which refers specifically to the consistency of evaluations and beliefs is "information support" (Chein, 1951; Smith, Bruner, and White, 1956)--the amount of information an individual has to support his evaluation. The most complete discussion of the role of consistency in maintaining stable attitudes through cognitive support has been reported by Rosenberg (1960) and by Abelson and Rosenberg (1958).

These conceptualizations of consistency are particularly relevant to two attitude content areas--political partisanship and racial prejudice. Both involve the identification of the self with one group and the rejection of another group. Sherif and Cantril (1947) in discussing ego-involving attitudes placed particular emphasis on racial, religious, and political party identifications. In these areas, the personal motivations to maintain consistency are much greater because of the personal threat posed by inconsistency.

It has been reported that inconsistent responses to racial groups are less frequent in older children (Radke and Sutherland, 1949); that inter-item correlations of the F scale are lower for adolescents than for adults (Livson and Nichols, 1957); that split-half reliability coefficients on ethnic prejudice scales increase with age during adolescence (Wilson, 1963).

The role of consistency in political party memberships has been most fully explored in studies of adults. Berelson, Lazarsfeld, and McPhee (1954) found that most respondents see their candidate's stand on issues as similar to their own and the opponent's stand as dissimilar. Stillman, Guthrie, and Becker (1960) reported a strong relationship between identification with party and attributing to that party responsibility for initiating positively viewed legislation and making unique contributions to maintaining our way of life.

Campbell et al. (1960) also reported that partisan commitment provided adults with a core of consistent evaluations of the political world; those without party identification had less consistent attitudes.

A few authors have also dealt with the changes occurring between adolescence and adulthood in the consistency of political partisanship. Froman and Skipper (1962) reported from testing high school and university students and teachers that with increasing education there was a decreased tendency to perceive a party's stand inaccurately on issues where parties do take different stands (e.g., public ownership of natural resources) and a decreased tendency to attribute differential contributions to the parties on issues which are supported equally in both parties' platforms (e.g., minimizing the chances of war). Taking a more direct kind of consistency, Dodge and Uyeki (1962) reported that a lower percentage of college students chose the party with which they were affiliated as better qualified to solve problems on which parties traditionally differ than did the parent generation of the corresponding affiliation.

Consistency in partisan attitudes exists to some extent in children. For example, eighth graders' choice of party label correlated .49 with appropriate feelings of happiness or sadness when they heard that Kennedy won the 1960 election; party affiliation also correlated .51 with perception that the chosen party does more valuable things for the country (Hess and Torney, 1965).

The progression of children toward the partisan consistency of adults would be easier to document if older children expressed stronger partisan feeling than younger children. However, one of the major findings in the recent study of political socialization (Hess and Torney, 1965) was that there is a sharp increase with age in the perception that it is best to vote independently of political affiliation. This suggests that another kind of consistency may be developing during childhood--between normative statements about ideal attitudes and behaviors and one's own attitudes. Getzels and Walsh (1958) indicated that the older child has brought his beliefs and attitudes into line with what he perceives as the socially desirable reactions. Independent party affiliation may not be so ego-involving as commitment to a particular political party, however, and may not produce the type or degree of consistency noted in studies of adult commitment to a particular party.

Relationships of consistency also have subtle aspects. Murphy, Murphy, and Newcomb (1937) noted that attitudes may fit into a pattern for the individual although they do not necessarily have ideological consistency to an observer. They also suggested that attitudes toward stereotyped objects are more likely to be consistent because they have been accepted as a whole early in life, not because of the operation of intellectual patterning by the individual. Political partisanship may be an example of this type of attitude.

Wilson (1961) attacked this problem from the developmental perspective, suggesting that responses may be consistent because the individual has accepted information only from consistent sources (second-hand consistency) or that the responses may be consistent because the individual is able to recognize the contradictions and resolve them. This second process is more likely to be important in children of high cognitive ability and in older adolescents who are oriented to sources other than parents.

Consistency may also be evaluated operationally by correlation or by methods such as Guttman scaling. The correlations between attitudes or the existence of Guttman scales in a population are usually evidence of some structuring of attitudes by individuals (paraphrase, Campbell *et al.*, 1960, p. 191). Structural consistency may concern the patterning of beliefs in a way congruent with patterning shown by the group. Because beliefs are assimilated from the social context, the individual in the course of development should come to order the questionnaire responses mediated by an attitude in a way similar to the ordering by the group. An individual who endorses attitude statements in accordance with Guttman's scaling model (1950) or Fiske's (1963) cumulative homogeneity model demonstrates this assimilation of group patterning. Wilson (1963) used a subject's classification as a Guttman error type as a measure of the inconsistency among responses mediated by an attitude.

With respect to individual differences in attitude consistency, Hyman and Sheatsley (1954) reported that correlations among attitude items in different populations varied widely. Triandis and Fishbein (1963) found that the attitudes of prejudiced subjects toward the objects of their prejudice, unlike the attitudes of unprejudiced subjects, could not be predicted from evaluations and beliefs on the basis of the congruity principle. Kerlinger (1956) found that integrated educational attitudes (measured by intra-class correlations in a Q-sort of attitude statements) were more characteristic of professors of education than of professors in other fields or of college administrators. This study indicates that experience in a field leads to more consistent responses to attitude statements related to that field.

In content areas where evaluation means identifying oneself as a member of an "in-group," the consistency of evaluations and beliefs is a dimension of attitude-concept systems along which individuals may differ. In this research, political party identification is the best example of an attitude area which involves this personal motivation to reduce inconsistency.

Object differentiation

The concept of differentiation has received wide attention in social psychology (Lewin, 1951), in studies of development (Piaget, 1952; Werner, 1948; Witkin, 1962; Kohlberg, 1961) and in studies of adult attitude (French, 1947; Katz and Stotland, 1959; Krech and Crutchfield, 1948; Smith, Bruner, and White, 1956). In this research, object differentiation and attribute differentiation are considered. Few writers have attempted to measure these dimensions separately. In fact, Scott (1963) pointed out that the differentiation of an object from other objects depends in part on the complexity of the attributes with which it is viewed.

Two assumptions about the process of attitude development must be made before detailed consideration of these types of differentiation. First, in relating to unfamiliar authority figures (the policeman and the President), it is assumed that the evaluation of the object is made by transferring or generalizing a previously formed evaluation of a closer and better known authority (the father). Piaget observed in discussing the formation of attitudes toward persons:

> . . . the first personal schemas are afterwards generalized and applied to many other people. According as the first inter-individual experiences of the child are connected with a father who is understanding or dominating, loving or cruel, etc., the child will tend . . . to assimilate all other individuals to this father schema. (Piaget, 1951, p. 207.)

Freud (1939) considered the transfer of feelings about the father to images of God. Other writers (Hoffman, 1960; Koch, 1955; Trapp and Kausler, 1958) have reported from empirical studies that attitudes toward parents are generalized to non-family authority figures.

Subsequent experience (vicarious and direct) with these authorities results in the differentiation of these figures from the father, particularly along the evaluative dimension. When the figures involved are the father and the President—clear examples of persons who are close and distant, concerned for the child and not concerned—the ability to differentiate objects should be particularly clear along the affective dimension. Older children should be capable of specializing the father's role as the nurturant one and differentiating it from the non-personal role of the President.

The process of generalization and differentiation in attitude formation is analogous to certain aspects of concept learning in children. Young children treat as equivalent many instances which older children are capable of differentiating. Gibson and Gibson's study (1955) of perceptual learning as progressive differentiation is a classic in this area; Martin (1951) demonstrated this in the field of quantitative concepts.

In this research, object differentiation is associated with the existence of separate or distinct attitude-concept systems. Such differentiation is a characteristic of more highly structured attitude systems in adults; this differentiation should increase with age.

Attribute differentiation

A related set of assumptions is a necessary preliminary to the discussion of attribute differentiation in judgments of authority figures, the most important assumption being the primacy of that evaluation dimension. Consistency between evaluations and less emotionally tinged beliefs is crucial in the formation of attitudes. However, this may be replaced at a later period by tolerance for some inconsistency.

Scott (1963) suggested that because the earliest cognitive dimension for classifying objects is evaluative, the distinctiveness of any other dimension depends upon its independence from this affective dimension. The complexity of the image of any object depends on the number of independent attributes along which it is classified. This suggests that consistency of beliefs and evaluations in judging certain objects may be most important at early stages of development but may decline as the attitude-concept system becomes more functional. Hess (1963), Hess and Easton (1960), and Hess and

Torney (1965) have reported from studies of group trends that young children evaluate the personal qualities of political figures highly and judge their capacity for performing their roles positively. In older children, personal evaluations are considerably lower while judgments of role capacity remain high. Shukla (1962) in a factor-analytic study of the semantic differential reported that for older children the potency and evaluative dimensions were more independent; younger children also made more extensive use of the evaluative dimension.

Gollin (1958) in a study of pre-adolescent children's person perception differentiated three ways of handling inconsistent information from a filmed presentation portraying the same individual behaving in a way clearly defined as bad and in a way defined as good. Some subjects represented only one behavior theme in their responses ignoring the inconsistent information; some stated both themes without relating them to each other; some attempted to account for the good and bad aspects of behavior using some more inclusive concept. The integration of inconsistent material demanded the introduction of a context not given in the perceptual situation. Gollin found increases with age in the recognition of inconsistencies and in the integration of these under some unifying concept or motive.

Attribute differentiation should operate particularly in judgments about distant figures--the policeman and the President. Perception of their role and power capabilities need to be maintained in spite of inconsistent negative personal feelings which may develop later. In the formative period both personal feeling and role beliefs are positive. For the policeman and the President the direction of development, as more experience is gained, would be toward positive role and power judgments which are not dependent upon positive personal evaluation. For judgments of the father this tolerance for inconsistency is expected to be less important. Since there is no sizeable increment in information and familiarity with the father during elementary school, the relative importance of evaluation and beliefs should remain constant.

The preceding section has presented the five structural dimensions to be assessed in this research along with evidence from previous studies leading to the expectation that these structural characteristics will show an increase with age.

Measurement Problems in Attitude Research

Concern over measurement problems was a major part of the impetus of this research. Measurement of attitudes and concepts presents difficult problems even in adult populations. Self-report ratings have been the traditional method. The subject must infer the meaning of the question and fit his own reactions into a rating scale; his criteria for formulating responses are unknown. Recently a number of investigators have examined self-report data critically (Hess and Torney, 1963; Yarrow, 1963). The criticism that responses are determined by response sets or response styles was made first by Cronbach (1946) and has recently been reviewed and questioned by Rorer (1963). Loehlin (1961), for example, has pointed out that consistent individual differences in self description are often no larger than consistent individual differences in the meanings of words used in self descriptions.

Measuring children's attitudes and opinions presents even more serious problems. Attitudes toward complex social stimuli are usually defined from studies of adults; the appropriateness of the objects, questions, and terminology for children is unknown. Escalona and Heider (1959) have pointed out that when a personality characteristic is changing, it has low correlations with other variables. Similarly, in the study of political socialization reported by Hess and Torney (1965), correlations between political attitude items and independent variables were much lower for children than for adults, perhaps because these attitudes are changing.

Similar self-report measurement problems have arisen in the field of personality testing; two approaches have been devised to overcome these problems. In the first, projective tests have been used to derive from a subject's report of fantasy something about his personality that he did not know he was revealing. A second approach has concentrated on "stylistic" aspects of personality. For example, Frenkel-Brunswick (1949, p. 140) noted that formal stylistic elements in personality--intolerance of ambiguity, exaggeration, etc., are more pervasive, persistent, and general than content elements like the Oedipus complex, sibling rivalry; such formal elements are not so subject to censorship. An application of this approach to self-report data has investigated response-set scores as meaningful individual difference variables (Couch and Keniston, 1960; Messick, 1962). Consistent relationships between response style or response set scores and other variables have not been found in empirical work, however (see recent review by Rorer, 1963).

Applying similar approaches to attitude measurement, Campbell (1950) reviewed indirect methods of measuring the content components of attitudes--techniques dealing with matters such as biased performance on information tests, distorted syllogistic reasoning, selective memorization. He did not, however, consider the structure of these attitudes or the process involved in their development.

Getzels and Walsh (1958), dealing with the problem that responses to questions about conflicted objects are more discrepant from real feelings than responses in less conflictual areas, developed direct and projective sentence completions matched for content. Socialization was defined by these authors as the proportion of asocial responses on a projective (indirect) test which were reversed to socially acceptable responses on a direct measure. These socialization scores increased from Grade 3 through Grade 10. This scoring of discrepancy provided an indirect measure of the results of the socialization process. Unlike many measures of attitude, this technique and theory could be applied to studies of socialization in a number of other content areas.

Scott (1963) suggested that to focus on the structural properties of cognition (relationships between elements) is the most useful way to deal with concepts of the self and of objects in the social world. Contents of cognition are endlessly varied and may be shared by different individuals for different reasons and with different antecedents; the structure of cognition is more enduring, is invariant over situations, and may be described by a limited number of terms (paraphrase of Scott, 1963, p. 267).

Measures of structural dimensions, because they are independent of content and depend upon relationship of responses within individuals, present a promising solution to some of these problems in attitude research with children.

Questions and Hypotheses

Relationships Between Structural Dimensions

The relationships between these structural dimensions in different content areas and between these structural dimensions within the same content area are important in understanding the meaning and generality of these dimensions.

The majority of information about the relationship of the same structural dimension in different content areas concerns the existence of independent dimensions of judgment--attribute differentiation. Two studies were cited by Scott (1963) in support of the position that structural dimensions are not general characteristics of the individual but are specific to conceptual universes. Wyer (1962) found that the number of independent dimensions used in expressing already formed attitudes toward people was not related to the number of dimensions formed in judging geometric figures. Ulehla (1961) reported that the cognitive complexity shown by nurses dealing with schizophrenic symptoms was not correlated with cognitive complexity in defining the nurse's role. On the other hand, Gollin and Rosenberg (1956) reported a positive relationship between the formation of aggregated or integrated impressions in a person-perception situation and performance on a concept-formation task. Bieri and Blacker (1956) found a positive association between the complexity of cognition used in describing persons and the complexity of determinants of Rorschach responses. Including dimensions other than cognitive complexity, French (1947) reported that individuals with highly organized philosophic-religious sentiments possessed highly organized sentiments in other content areas (family and socio-political).

Fewer sets of results are relevant to the relationship of different structural dimensions within a single content area. Dodd and Svalastoga (1952) made a particularly interesting study concerning the relationship of "Don't Know" responses and attitude stability. They computed for each of seven items both the percentage of "Don't Know" responses and the percentage of non-"Don't Know" responses which were stable on a retest. The rank order correlation between the two percentages for the seven items was .91. They suggested that the degree to which an opinion is poorly structured may be measured either by determining the number of individuals who have no opinion on an item or by assessing the number who express an opinion but change their response on a retest. They did not, however, investigate the characteristics of individuals who gave a large number of "Don't Know" responses or who had highly unstable opinions.

Fiske (1957) discussed Glaser's finding that answers to achievement questions near a subject's threshold are most likely to be variable, relating this to the expectation that attitude or personality scales with a high frequency of "?" responses will be more variable. Finally, a reinterpretation of results from another study of Scott (1959) is relevant. Subjects participated in a debate in which they took a side opposite to their own attitude. In a measurement of attitude after this debate, the beliefs of those with inconsistent attitudes and beliefs changed more than those with consistent attitudes. However, the change was not consistently in the direction of the side taken in the debate. Reinterpreted, this may indicate that those with cognitively inconsistent attitudes have less stable attitudes than others.

In summary, there are three possibilities. There is not enough evidence from studies closely related to this one to suggest which is most likely. Either attitude structure is a unitary characteristic of an attitude-concept system resulting in a uniformly high or low level of structure on all dimensions (produced by factors such as the relative familiarity of the attitude object); or a given amount of attitude structure may characterize an individual's attitudes in all attitude-concept systems (at least within a general content area such as political attitudes); or structural dimensions of attitudes may be independent of each other both within an attitude-concept system and in different attitude-concept systems. Because of the limited evidence available in previous work, no specific prediction was made.

Question 1: How general are structural dimensions across different attitude areas?

Question 1A: What is the relationship between the same structural dimension in different attitude-concept systems?

Question 1B: What is the relationship between different structural dimensions within an attitude-concept system?

Attitude Structure and Test Taking Experience

Although the process by which attitudes become more structured is not clear, the experience of answering questions about poorly structured attitudes may promote greater attitude structure on subsequent testings. Lighthall (1963) reported that children who took an anxiety scale mobilized their defenses and received lower anxiety scores on a second testing. Fiske (1957) suggested that the experience of taking a test influences the responses on repeated testings; these differences are most apparent between the first and second testing. In this research it is possible that a child may develop more structured attitudes as a result of answering the questionnaire; on a second testing his attitudes may demonstrate greater structure.

Question 2: Does the process of formulating answers to questions concerning an attitude object increase the structure of the corresponding attitude-concept system? Is this an aspect of the process by which attitudes become more structured?

Hypothesis 2: Experience gained from responding to an attitude instrument will increase the structure of attitudes expressed on a second administration of the same instrument.

Structural Dimensions and School Grade Level

The structural dimensions discussed in the earlier section of this chapter were all considered as dimensions along which development may occur, resulting in the following question and hypotheses:

Question 3: What is the relationship of structural dimensions to school grade? Does development occur in attitude structure during the elementary school years?

Hypothesis 3A: Attitude-concept systems will be more extensive for children of higher grade levels.

Hypothesis 3B: Attitude-concept systems will be more stable for children of higher grade levels.

Hypothesis 3C: The objects around which attitude-concept systems are oriented will be more differentiated for children of higher grade levels.

Hypothesis 3D: In judgments of persons and social objects, where group identification is not important (e.g., ratings of policeman and President), the differentiation of role and power attributes will be greater for children of higher grade levels. In judgments of the father where the affective relationship remains primary, attribute differentiation will not be greater for children of higher grade levels.

Hypothesis 3E: In attitude areas where identification with a group is important (e.g., political party) the elements of attitude-concept systems will be more consistent for children of higher grade levels.

Structural Dimensions and IQ

A similar body of literature suggests that this type of development in attitude-concept systems is dependent in part upon the growth of cognitive ability. Vinacke (1951) stated that one of the major reasons that mental age increases during childhood is that the ability to conceptualize is increasing. In regard to extensiveness, Bates (1947), Eskridge (1939), Meltzer (1925), and Ordan (1945) reported that children's ability to identify, define, and differentiate concepts and to evaluate the relative importance of social problems is related to IQ.

For the dimension of stability, Lentz (1934) reported that change scores were negatively related to intelligence. Glaser (1949), however, attributed this finding to restrictions of test range. He found that the number of items changed on an intelligence test was highly correlated with intelligence level, but that this relationship was much lower when change scores were derived from instruments other than intelligence tests.

In the ego-involving area of religion, greater consistency between evaluations and beliefs among more intelligent subjects was reported by French (1947). Wilson (1961) found that a low level of internal consistency in racial attitudes resulted when the child was oriented toward extraparental (potentially inconsistent) sources of information but was low in cognitive ability (incapable of integrating this information). Wilson also reported that the mean number of Guttman scale errors decreased with increasing abstract cognitive ability. More intelligent individuals are more able to perceive inconsistencies among responses, he concluded. Murphy, Murphy, and Newcomb (1937) reported that consistent patterns of attitude were more characteristic of individuals of high intelligence. In the capacity to form independent dimensions of judgment (attribute differentiation), Gollin (1958) reported a relationship between IQ and the ability to account for both good and bad elements of behavior in a person-perception situation.

Question 4: How does attitude structure differ for children of high and low intelligence (with grade held constant)?

Hypothesis 4A: Attitude-concept systems will be more extensive for children with higher IQ's.

Hypothesis 4B: Attitude-concept systems will be more stable for children with higher IQ's.

Hypothesis 4C: The objects around which attitude-concept systems are oriented will be more differentiated for children with higher IQ's.

Hypothesis 4D: In judgments of persons and social objects where group identification is not important (e.g., ratings of policeman and President), the differentiation of role and power attributes from affiliation will be greater for children of higher IQ's. In judgments of the father, attribute differentiation will not vary with IQ.

Hypothesis 4E: In attitude areas where identification with a group is important (e.g., political party) the elements of attitude-concept systems will be more consistent for children with higher IQ's.

Sex Difference in Structural Dimensions

There is some evidence of cognitive differences between boys and girls, but one must make inferences to structural attitude development from quite diverse findings and from traits whose relationship to attitude structure is not clear-cut. For the dimension of extensiveness, the evidence is fairly clear. Recent studies of recognition vocabulary during the elementary school years favor boys (Clark, 1959; Miele, 1958; Templin, 1957). This is even more clear for political concepts and vocabulary (Burton, 1936; Greenstein, 1965). There is also evidence that adult women inflate the no-opinion category in public opinion polls (Cantril and Strunk, 1951; Rugg, 1941).

Few sex differences have been reported in the reliability or stability of measures. In qualities which may be related to stability, Hartshorne, May, and Maller (1929) reported that girls were more persistent than boys in completing work tasks in the presence of interesting distractions. Pettigrew (1958) and Wallach and Caron (1959) reported narrower category use by girls and women. These findings suggest, though not conclusively, that girls may demonstrate more short term stability of attitude response.

For the dimension of consistency, there is some evidence that researchers obtain higher correlations between diverse universes of variables for females (Thurstone religious attitude scales--Diggory, 1953; cognitive control principles--Gardner, Holzman, Klein, Linton, and Spence, 1959; cheating behavior and confession--Rebelsky, Allinsmith, and Grinder, 1963). However, these findings vary by the phenomena investigated. Peak, Muney, and Clay (1960) reported that relationships between variables were stronger for men.

On the dimension of attribute differentiation, data from different studies are somewhat difficult to unify into a single prediction of sex differences. There is consensus that, particularly on evaluative scales, women make more extreme ratings and that these are more often toward the positive side of the scale (Berg and Collier, 1953; Borgatta and Glass, 1961; Goldfried and Kissel, 1963; Osgood, Suci, and Tannenbaum, 1957; Peak, Muney, and Clay, 1960; Sheriffs and Jarrett, 1953; Spivak, Levine, and Brenner, 1961). In a factor-analytic study, Lin (1962) reported that the evaluative dimension was a more prominent dimension of self ratings for eighth and twelfth grade females than for males. The impprtance of this evaluative dimension for females would lead to a prediction of less differentiation between evaluation and beliefs in girls. However, Gollin (1958) reported that girls were more likely than boys to unify the ambivalent aspects of a person-perception scene that they witnessed, indicating more dimensional complexity.

In the ability to differentiate objects (in this case the father and the President), a diverse set of findings could be used to predict the superiority of males. Witkin (1962) reported that in general boys were more field independent than girls. Girls are more attached to personal figures (Goodenough, 1957) and may, therefore, have more difficulty in differentiating them from each other. Parsons' discussion of the differentiation of the instrumental role which boys typically perform (Parsons and Bales, 1955) and Lynn's (1962) comment that boys learn to restructure the field and differentiate the male role because they must solve a problem rather than learning sex role behavior directly as the girls can would lead to the same prediction.

Question 5: How does attitude structure differ for boys and girls?

Hypothesis 5A: Boys will have more extensive attitude-concept systems than girls.

Hypothesis 5B: Girls will have more stable attitude-concept systems than boys.

Hypothesis 5C: The objects around which attitude-concept systems are oriented will be more differentiated for boys.

Hypothesis 5D: In judgments of persons and social objects, where group identification is not important (e.g., ratings of policeman, President, and father) the differentiation of role and power attributes from affiliation will be greater for boys.

Hypothesis 5E: In attitude areas where identification with a group is important (e.g., political party) the elements of attitude-concept systems will be more consistent for girls.

Structural Dimensions and Political Involvement

Relationships between structural dimensions of attitude and measures of the level of political awareness or involvement are important for understanding both the process of attitude development and the role of salience of an attitude area in promoting highly structured attitudes.

Previous research using adults has been limited to the association between extensiveness of political attitudes and variables such as political interest. Douvan (1958) found a relationship between "Don't Know" responses and political efficacy, using as an explanatory variable the level of energy in approach to public affairs. Stillman, Guthrie, and Becker (1960) pointed out a relationship between low interest and frequent "Don't Know" responses. Lazarsfeld, Berelson, and Gaudet (1948) reported that as the level of expressed interest in the campaign decreased, "Don't Know" responses to opinion questions became more frequent. Campbell et al. (1960) found that caring about the outcome of the election was related to the number of partisan attitudes an individual had formed.

Question 6: How does attitude structure differ for children with varying amounts of political interest and involvement?

Hypothesis 6A: Attitude-concept systems will be more extensive for children who have high political involvement.

Hypothesis 6B: Attitude-concept systems will be more stable for children who have high political involvement.

Hypothesis 6C: The elements of the political party attitude-concept system will be more consistent for children who have high political involvement.

CHAPTER II

SOURCE OF DATA AND SCORING PROCEDURES

Source of Data

Before the beginning of this research, hour-long questionnaires concerning political attitudes and concepts had been obtained from approximately twelve thousand children, Grades 2 through 8. This data collection had been conducted for a study of political socialization (Cooperative Office of Education Grant No. 1078) in one large city and one small city of each major region of the United States (West, South, Midwest, Northeast) during the period from December, 1961, through May, 1962. In each city, two schools from working class areas and two schools from middle class areas had been tested. A subgroup of Grade 2, 4, 6, and 8 children numbering 1,158 had repeated the questionnaire from four to fourteen days after the first administration. There were no systematic selection factors operating in the inclusion of children in the test-retest group. Although the sample is not random, it is sufficiently large and varied that the major effects of variables such as grade, sex, and intelligence may be accurately assessed. The population, method of item selection, and results of basic analyses are presented in Hess and Torney (1965).

Independent Variables

Grade

Most studies of development have used age as the major developmental indicator. Because the data for this research had been collected in classroom groups, there were advantages to the use of school grade instead of age. Approximately equal numbers of children had been tested at each grade level, and the questionnaire had been administered in three forms (a 16-page form administered to second graders, 24-page form to third graders, and the complete 40-page form to fourth through eighth graders). Consequently the information available for any child was determined by his grade level. In the total group the correlation between grade and age was .96.

This research assumes that grade in school and chronological age relate to the same function; each year the child matures cognitively and acquires additional experience.

Intelligence

Intelligence test scores had been coded from the school files for 84.4 per cent of the tested group. Tables compiled by Flanagan and Schwarz (1958) had been used to convert the IQ's to a common stanine scale.[1]

Political Involvement

Indices of political interest, participation in political discussion, and political activity were chosen from the questionnaire as the measures of political involvement to be related to the structural dimensions. All were independent of artifactual correlation with these structural measures. The items used to form these scores are listed in Appendix A. The rationale for scoring each of these indices is presented in Hess and Torney (1965).

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[1] These authors formed a common scale for IQ by determining equivalent scores for eleven different intelligence tests. The resulting scores were graduated in units called stanines, a form of standard score which transforms the original scores into nine groups as follows: the first stanine represents the lowest 4 per cent of the population; the second, the next 7 per cent; the third, the next 12 per cent; the fourth, the next 17 per cent; the fifth, the middle 20 per cent, and so on.

Derived Variables

Content Areas

Three content areas or attitude-concept systems covered in the political attitude questionnaire were chosen for this study of structural development. Both theoretical considerations and the availability of questions of a similar format where the "Don't Know" option had been included were important in the decision to concentrate on these topics.

Political parties

Attitudes toward political parties were selected because this has been the most frequently investigated dimension of adult political behavior and because party allegiance is a clear group identification with ego-involving implications. It has been shown that for adults there is a high degree of consistency between party allegiance, beliefs about the party, and election attitudes (studies cited in Chapter I). A large number of items relating to this topic, many of them with "Don't Know" options, had been included in the questionnaire (see Appendix A). This also represents an area which receives little stress in the school curriculum.

Democracy, efficacy, and influence

The child's concept of the democratic governmental processes and the means by which citizens and pressure groups influence these processes were chosen because these are also important elements of adult political attitudes. Efficacy, in particular, has been one of the most frequently used concepts in studies of political behavior, first operationalized by Campbell, Gurin, and Miller (1954). The relevance of these attitudes for children was unknown.

While definitions of the ideal democratic process receive considerable attention in the elementary school curriculum, there is some evidence that the influence which pressure groups have on public policy is not stressed by the schools (Hess and Torney, 1965). A set of five items with "Don't Know" options were available as an Efficacy Scale and had been extensively used by Hess and Torney (1965). A set of ratings of the influence which specific persons and groups have on government policy and questions concerning the meaning of democracy, including "Don't Know" options, were also available to form an Influence on Government Scale (see Appendix A).

Attitudes toward family and non-family figures

Attitudes toward a familiar figure (father) and toward more remote figures (President and policeman) were chosen because of the hypothesized importance of generalization in forming evaluations of distant objects. Subsequent differentiation between familiar and distant objects is part of the process of attitude-concept development. Because this area does not involve identification with an in-group and because there are several dimensions which are not necessarily connected with evaluation, this area is also useful for studying the development of tolerance for inconsistency between evaluations and other beliefs (attribute differentiation). The rating-scale scores available for these figures are listed in Appendix A.

Derived Variables as Measures of Structural Dimensions

In measuring structural attitude dimensions, several factors must be kept in mind. Because of the complexity of structural relationships, it is particularly important that there be a high degree of isomorphism between construct and measure. Scott (1963) suggested that two kinds of isomorphism or similarity must exist. First, the task must be structurally similar to the construct. If the investigator is interested in learning what similarities a subject perceives in different objects, the subject should be asked to make independent ratings of two objects on the same scales. Second, structural similarity must be retained in the data analysis by preserving the unit within which structuring occurs. Since cognitive structure within the individual is usually the focus, the relationship of elements within the individual rather than relationship among group means must be the material for analysis.

This suggests a new approach to raw data (n items on m occasions for N individuals), an approach which may be contrasted with the aims and methods of item analysis and group-level analysis as follows:

1. Item analysis correlates two items with each other, over N individuals, to determine whether they measure the same content dimension. This procedure averages the covariation between two items over a population. The aim of such analysis is to develop a better set of items to measure a given content area.

2. An analysis of attitude content level in a group sums over the N individuals to determine the mean level of response to a particular item (or a subscore obtained by summing content scores on a subgroup of the n items). The aim of this analysis is to describe the level of attitude content in the group.

3. The analysis to be used in this research obtains from the raw data a score for each individual representing a structural relationship within his n responses or within his responses on the m occasions (rather than a score representing the content of his responses). Each N individual receives a set of derived scores to represent structural relationships among his original responses.

This is similar to Broverman's discussion of ipsative relationships. "The assumption of ipsative scores is that the different behaviors of an individual are ordered on dimensions or scales within the individual" (Broverman, 1962, p. 296).

This kind of scoring has a particular meaning in instances where correlational analysis has traditionally been used. Medinnus (1962) suggested that it may be more valuable to examine those individuals who are on a regression line and those who are away from it, than to accept the value of the correlation as the only index of relationship. Ghiselli (1956) used the discrepancy in standard scores between a predictor and a criterion to determine which individuals are predictable. It would be possible to derive a score representing the distance of an individual from the regression line. This would be a structural variable because it would represent the relationship between two items within an individual. However, the use of correlation or regression raises a problem of isomorphism between variable and construct. Although the use of standard scores centered around the group mean (as in regression) has advantages for group comparisons, this is not always true for intra-individual structural relationships. It may be more important to determine whether the individual gave precisely the same response to two items or to the same item on two occasions than to determine his position in relation to a distribution of other individuals. Analyzing the meaning of such scores, however, requires comparing the individual to some group.

This chapter will specify particular derived variables used as measures of the structural dimensions of attitude development.

Scoring of Derived Variables

Extensiveness

The analysis of the dimension of extensiveness led to the construction of subscores by summing the number of "Don't Know" responses to sets of items. The following subscores were formed: Image of Political Parties' Stands DK, General Political Party Attitudes DK,[1] Concept of Democracy DK, Influence on

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[1] For a number of items in the General Party Attitudes DK, both "Don't Know" and no response had been coded "0". On other items, where "0" stood only for non-response, the rate of non-response was seldom greater than 1.5

Government DK, Efficacy DK. A total DK score was formed by summing all of the subscores with a group of miscellaneous items. The items included in each set are specified in Appendix A. In every case, subjects who had omitted any question in the item set were not scored. Test-retest reliability coefficients for these scores ranged from .46 to .81, with a median of .65.

Consistency

The child's political party affiliation was obtained from his response to the following question:

If you could vote, what would you be? (Choose one.)

1. A Republican.
2. A Democrat.
3. Sometimes a Democrat and sometimes a Republican.
4. I don't know which I would be.
5. I don't know what Democrat and Republican mean.

A child who did not respond to this question or who chose alternative 4 or 5 was not scored on any partisan consistency index.

Consistency of Partisan Affiliation and Image of Parties' Stands on Issues was scored as follows: first, a Democratic-Republican Score on Image of Parties' Stands (items listed in Appendix A) was formed by giving a score of one for each response attributing greater contribution to the Republicans and a three for each response attributing a greater contribution to the Democrats; a score of two was given for each item where the response "Both about the same" had been chosen; these scores were summed for six items inquiring which party does most for the country, most to help people out of work, etc. The mean score for the total group on this index was 12.06 (twelve being the

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per cent. On these items, where "0" may represent either non-response or "Don't Know," the percentage of 0's ranged from 5 to 30. On these items, "0" has been taken as indicating a "Don't Know" response.

score which indicated choice of an equal number of Democrat and Republican responses or the choice of "Both . . . same" for all items).

When a child had answered that he was affiliated with the Republicans (alternative 1 in previously cited question) and responded "Republicans" to two or more of the questions about Parties' Stands (score of 6-10), or had reported Democratic affiliation (alternative 2 in previously cited question) and had responded "Democrat" to two or more of the questions about Parties' Stands (score of 14-18), or had claimed an independent partisan affiliation (choice of alternative 3) and had scored neither Democratic nor Republican on Parties' Stands (score of 11-13), he was scored consistent. A child who had reported Republican affiliation and received a score on the Democratic side of Parties' Stands, or reported Democratic affiliation and received a score on the Republican side of Parties' Stands was scored inconsistent. The test-retest reliability coefficient for this Consistency Score was .32.

Consistency of Partisan Affiliation and Response to the 1960 Election was scored as follows: Democrats who felt very happy or happy when Kennedy won the election and Republicans who felt bad or very bad were scored consistent (see Appendix A). Inconsistency was scored for Democrats who felt unhappy and Republicans who felt happy. The test-retest reliability coefficient for this consistency score was .48.

Consistency of the belief that it is a good thing to be politically independent with the report that one is independent (or the consistency of the belief that it is a good thing to be a partisan with the report that one is a partisan) were scored from the item cited previously and the item on Norms of Independence cited in Appendix A--General Party Attitudes Item 3.

An attempt was made to determine the consistency of endorsements of attitude items with special reference to the Guttman Scaling Model. The five items picked for Guttman analysis were those used as the Efficacy Scale by Hess and Torney (1965)(see also Appendix A--Efficacy Items). No Guttman scaling procedure had been attempted with these items; they had been combined into an index on the basis of correlations. First, the simplest Guttman scaling technique was attempted, eliminating "Don't Know" responses and dividing other responses into agreement ("YES" and "yes") and disagreement ("NO" and "no"). However, one of the first requirements of Guttman scaling, that there be a range of agreement percentages, was not met by these items. For this reason, an attempt was made to scale these items using the division "NO" versus "no," "yes," and "YES" on a group of 3,534 sixth, seventh, and eighth graders who had answered every question with one of these alternatives--that is, who had no "Don't Know" responses or omitted responses. It was possible to scale four of these items (marked a in Appendix A) to a Coefficient of Reproducibility of .905. However, when individuals were scored according to whether they were a scale type or an error type on these items, the test-retest reliability coefficient was .27, appreciably below other reliability coefficients. Because of the arbitrary nature of the scoring (dividing "NO" from other alternatives) and because of the low reliability, this score was not analyzed further.

Object differentiation

Generalization or differentiation between objects has frequently been assessed by computing the correlations between ratings. This does not take into account that rating scales may differ widely in meaning for different children. The child's position relative to the mean of the distribution (the score utilized by correlation) may not be so meaningful as whether the child rates two figures at the same or different scalar positions. The latter approach assumes that there is greater constancy in the meaning of a scale position for one child rating different objects than for two children rating the same object. An additional drawback to the use of correlation is the difficulty of determining the degree of similarity indicated by a given correlation.

Certain assumptions were set forth in Chapter I concerning the development of attitudes toward distant and unfamiliar figures by the generalization of attitudes toward close and familiar figures (in this case the father). The father has a special role in fulfilling affectional and nurturant needs; the highly positive ratings given to father on these content rating scales are consistent with this assumption. Part of the process of attitude development in this situation would be increasing specialization of the father's role as an affective and nurturant one and a concurrent decline in expectation of similar gratifications from distant figures (in this case the President). The child who rates his father high on these personal dimensions and the President at a lower level has recognized the particular characteristic of the parental relationship and has also developed a more differentiated and realistic image of the President. The child who rates the President at the same level as his father is still generalizing his feelings for the parent to a distant figure about whom he knows little. The child who rates the President higher than his father has an unrealistic picture of the President's functions and evidences a lack of separation of two attitude-concept systems which should be distinct (or the unrealistic projection of qualities of the ideal father upon the President).

In line with these assumptions, the signed difference between the rating given to father and that given to the President on the scales "he would always want to help me" and "he is my favorite" were computed as Object Differentiation Scores. Their retest reliability coefficients were .48 and .56. Very few respondents viewed the President as more nurturant than their fathers. Two large groups that could be distinguished were those who rated their father higher than the President and those who rated father and President at the same scalar position.

Differentiation between political parties was assessed by the set of questions previously designated as Image of Parties' Stands (see Appendix A). This score summed choices of the alternative, "Both parties about the same." The test-retest reliability coefficient of this score was .69.

Attribute differentiation

In discussing object differentiation, particular assumptions were made about the role of highly positive evaluations in the formation of attitudes toward distant figures of authority. The continuing importance of these dimensions for nurturant parental figures and their diminishing importance for more distant political authority figures was stressed.

Conceptually the most clear cut scoring of attribute differentiation using derived variables would have been to take the absolute value of differences between ratings of the same figure on different dimensions. However, the data from the rating scales of the questionnaire were not suitable for computation of an exact difference score. The rating scales were not precisely equivalent although all had six points; for example, points on the scalar rating for "my favorite" were not labeled in the same way as points on the scalar rating of "knows a lot" (see Appendix A). Although standard scores are not particularly useful for derived variable comparisons, in this case there was no other way to equalize the distributions. Using standard scores for each item, the absolute value of these differences between role items and affiliative items were computed. The standard score distribution for each item had a large potential range but used only six points of it (in some cases widely separated points). The resulting difference scores were weighted by arbitrary factors resulting from the marked skew and unusual shape of some distributions.

The scoring procedure was subsequently revised. Each individual was given a standard score on each of the scales to be used. On the basis of findings of Hess and Torney (1965), the item "he is my favorite" was designated as the affiliation or evaluation item (see Appendix A). The ratings "can punish anyone" and "can make anyone do what he wants" were designated as items on the power dimension. The items "makes important decisions" and "is a leader" were designated as role items. For each of the three figures (President, policeman, father), a Role/Affiliation Differentiation Score was formed from the signed value of the difference between the standard score on the evaluation item and the average of the two standard-scored role items. The higher these Differentiation Scores, the more positive the rating of role relative to the rating of affiliation. In other words, a high Role/Affiliation Differentiation Score indicates that the figure is perceived positively on the role dimension, although the subject's liking for him as an individual may not be great. Power/Affiliation Differentiation Scores were formed in a similar fashion. This approach made use of assumptions similar to those used in scoring object differentiation. There were very few negative ratings given any of these figures on the evaluative dimension, making these scores in reality indices of degree of positive differentiation and making the assumption that evaluation (in this case highly positive) is the precursor of positive judgments concerning the role performance or power of authority figures.

The test-retest reliability coefficients for these six scores ranged from .42 to .55 with a median of .50; five out of six of these reliability coefficients were higher than the coefficients for scores based on the absolute value of the difference.

Stability

Although correlation summing over items has been used as an index of an individual's stability, it has some of the drawbacks cited previously. A child who moved every judgment toward a more positive response on the second testing would receive a correlation score of 1.0. It is more useful to determine whether an individual's response is at the same or at a different level on two occasions. And it is possible to sum the number of identical responses for items which do not have identical distributions (though they must have the same format).

The stability scores in this research were calculated in two ways. The majority of scores were a count of the number of items to which the individual had given the same response on the two administrations, summing across item groups with the same number of alternatives. This procedure assumed that category widths are approximately equal for different items. The second type of stability score summed the absolute value of the difference between the scaled response on Test 1 and that on Test 2 for a set of items. This could be scored only for items which had scalar measurement. The majority of stability scores could be used only with fourth, sixth, and eighth graders because of the limited number of questions administered to second graders.

To allow the maximum number of comparisons of stability scores between attitude areas and the maximum number of relationships with other structural dimensions, the following stability scores were computed: Image of Parties' Stands Stability, Concept of Democracy Stability, Efficacy Stability, Influence on Government Stability[1] (see Appendix A for item listings). All item groups for which "Don't Know" scores had been formed were included, with the exception of General Party Attitudes where the items were of too diverse format to allow a summation such as this. At a later stage of analysis, a third set of stability scores excluding "Don't Know" responses was formed for each of the item groups listed above; these scores represented the proportion of content responses (not including "Don't Know") which were stable.

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[1] Any subject who had "0" on all questions on the Influence Subscale (representing either eight "Don't Know" responses or eight non-responses) was not scored on this stability variable.

A Stability of Own Partisan Affiliation Score was formed from identical responses to the item used to ascertain partisan affiliation and the item about reactions to the 1960 election. Both of these items had particularly high reliability coefficients in the original analysis (Hess and Torney, 1965).

On the scales for judging the figures, the following nine Stability Scores were computed: Evaluation, Power, and Role of Father, President, and Policeman, respectively. A summed score for all non-family figures on all dimensions was formed from the number of stable items for all scales on policeman, President, Senator, Supreme Court, and Government (All Non-Family Stability Score). Three General Instability Scores for father, President, and policeman were computed using the six items which children at all grades had answered about each of these figures (see first six rating scales in Appendix A), by summing the absolute value of the difference between the response on Test 1 and that of Test 2. These were the only stability scores available for second graders.

No test-retest reliability coefficients are available for stability scores because each score utilized information from the only two testings.

CHAPTER III

RESULTS AND CONCLUSIONS

Introduction

The findings will be presented to correspond with the hypotheses. The following statistical procedures were employed: product-moment correlation (supplemented by analysis of the correlation ratio in cases where curvilinearity was suspected) was used to evaluate the relationship between structural dimensions. Comparisons of the mean response on Test 1 with the mean response on Test 2 were used to investigate the role of experience responding to a questionnaire upon attitude structuring. Three-way analysis of variance (linear model) was used to test variations of the derived measures of structural dimensions by grade, IQ, and sex.[1] The correlation between structural variables and the Political Involvement Score, within grade, partialing out IQ, was used to assess the relationship of this variable to political attitude structure. The .01 level of significance (two-tailed) was adopted in reporting all findings because of the large N available. Differences and associations which did not reach this level are reported as non-significant.

Relationships Between Structural Dimensions

Question 1: How general are structural dimensions across different attitude areas?

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[1] IQ was grouped into three levels as follows: first through fifth stanine scored low; sixth and seventh stanine scored medium; eighth and

Question 1A: What is the relationship between the same structural dimension in different attitude-concept systems?

Question 1B: What is the relationship between different structural dimensions within an attitude-concept system?

Relationship Between Subscores in Different Content Areas on the Same Structural Dimension

Extensiveness

The matrix of product moment correlations between Don't Know scores appears in the upper left hand corner of Table 1. Don't Know subscores for all dimensions were related to each other in a linear fashion at a highly significant level. The two DK scores which represented the same content area with different items (Image of Parties' Stands DK and General Party Attitudes DK) were correlated .56--the highest correlation in the matrix. An individual who has few formed opinions in an attitude-concept system is particularly likely to respond "Don't Know" to other items concerning the same attitude-concept system. The correlations between other DK subscores were not appreciably lower, however, ranging from .34 to .46. Extensiveness seems to be a structural dimension which is highly generalizable across political attitude-concept systems. This does not mean that "Don't Know" is operating like a response set, however. There is no evidence from this study that DK scores based on widely diverse content (e.g., political attitudes and attitudes toward mathematics) or on contentless stimuli (e.g., preference for geometrical forms) would be as highly correlated. In fact, Rorer (1963) has presented evidence that response styles in wider content domains or in contentless domains do not correlate with each other.

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ninth stanine scored high. For stability scores each grade was used separately; for other analysis Grades 3 and 4, Grades 5 and 6, and Grades 7 and 8 were grouped.

TABLE 1

CORRELATIONS BETWEEN DK SCORES AND STABILITY SCORES

Score	Party Stand DK	General Party DK	Efficacy DK	Influence DK	Democracy DK	Parties' Stand Stability	Efficacy Stability	Democracy Stability	Influence Stability
Image of Parties' Stands DK									
General Party Attitudes DK	.56								
Efficacy DK	.34	.43							
Influence on Government DK	.42	.46	.38						
Concept of Democracy DK	.39	.43	.33	.39					
Image of Parties' Stands Stability	-.01	.04	-.05	.06	.06				
Efficacy Stability	.01	-.04	.02	-.02	-.06	.14			
Concept of Democracy Stability	.09	.08	.03	.04	.07	.17	.12		
Influence on Government Stability	-.12	-.15	-.17	-.21	-.10	.13	.12	.21	

Note: Range of N on which correlations based: 703-785, all Grade 4, 6, and 8 subjects who repeated test. For N of 700, a correlation of .10 reaches the .01 level of significance (two-tailed).

Stability

Correlations between stability scores are presented in the lower right hand corner of Table 1. In contrast to the DK scores, stability scores based on different content areas were not strongly related to each other in a linear fashion. The correlations between Stability Scores based on the areas where DK was also scored ranged from .12 to .21. For a sample of this size these correlations were all significant but did not account for large proportions of variance. The matrix of product moment correlations between Stability Scores based on different dimensions for the three figures (President, policeman, and father) is presented as Table 2. These correlations were also low--ranging from -.03 to .23--fifteen out of thirty-six meeting the criterion of significance at the .01 level (two-tailed). This is better than chance, but the proportion of variance explained is very small. The tendency to respond to an item in a stable or unstable fashion is not highly consistent over separate topics.

Correlations between the three Instability Scores are presented in Table 3. These were appreciably higher. This may be due to the greater meaningfulness of amount of change on retest. The correlation of instability of attitudes toward non-family figures with each other was higher than the correlation between instability of father attitudes and instability of attitudes toward either non-family figure.

Attribute differentiation in judging figures on the same qualities

Correlations between the independence of evaluations and beliefs about the power or role performance of the three figures are presented in Table 4. These correlations indicate that the ability to make positive

TABLE 2

CORRELATIONS BETWEEN STABILITY SCORES FOR FIGURES

Score	Eval. Pres. Stability	Eval. Police. Stability	Eval. Father Stability	Role Pres. Stability	Role Police. Stability	Role Father Stability	Power Pres. Stability	Power Police. Stability	Power Father Stability
Evaluation President Stability									
Evaluation Policeman Stability	.23								
Evaluation Father Stability	.09	.15							
Role President Stability	.13	.15	.13						
Role Policeman Stability	.09	.10	.09	.18					
Role Father Stability	.03	.03	.13	.15	.21				
Power President Stability	.08	.07	.04	.13	.10	.08			
Power Policeman Stability	.11	.11	-.03	.12	.11	.00	.04		
Power Father Stability	-.03	.02	.09	-.03	.07	.20	.06	.03	

Note: Range of N on which correlations based: 588 to 745, all Grade 4, 6, and 8 subjects who repeated test. For N of 550, a correlation of .11 reaches the .01 level of significance (two-tailed).

TABLE 3

CORRELATIONS BETWEEN INSTABILITY SCORES FOR FIGURES

Figure	President	Father	Policeman
President			
Father	.26		
Policeman	.37	.22	

Note: Range of N on which correlations based: 851 to 1041, all Grade 2, 4, 6, and 8 subjects who repeated test. For N of 850, a correlation of .09 reaches the .01 level of significance (two-tailed).

TABLE 4

CORRELATIONS BETWEEN ATTRIBUTE DIFFERENTIATION SCORES FOR DIFFERENT FIGURES

Score	Diff. Pres. Role/Aff.	Diff. Pres. Power/Aff.	Diff. Police. Role/Aff.	Diff. Police. Power/Aff.	Diff. Father Role/Aff.	Diff. Father Power/Aff.
Differentiation of Role/ Affiliation for President						
Differentiation of Power/ Affiliation for President	...[a]					
Differentiation of Role/ Affiliation for Policeman	.30	.20				
Differentiation of Power/ Affiliation for Policeman	.24	.30	...[a]			
Differentiation of Role/ Affiliation for Father	.06	.02	.10	.01		
Differentiation of Power/ Affiliation for Father	-.02	.01	.02	.12	...[a]	

Note: Range of N on which correlations based: 631 to 748, all Grade 4, 6, and 8 subjects who repeated test. For N of 600, a correlation of .11 reaches the .01 level of significance (two-tailed).

[a] The correlation coefficient is omitted from cells where an artifactual relationship exists between variables (usually two derived variables based on information from one of the same original variables).

judgments of the role performance or power of figures independent of affiliative feelings about them is correlated for the two non-family figures (President and policeman) but that variations in this ability for father are not correlated with variations in this ability for other figures. In other words, the degree of structure in the attitude-concept systems which surround the policeman and President is associated. A similar finding was reported on the dimension of stability, where correlations between Instability Scores for policeman and President were much higher than correlations between the Father Instability Score and the Instability Scores for either of the other figures.

The correlation between the Object Differentiation Scores for father and President was .36 (significant at the .001 level) indicating that the separateness of the attitude-concept systems may be assessed in a consistent fashion by both items.

Relationships Between Subscores in the Same Content Area Assessing Different Structural Dimensions

Extensiveness and stability

The two structural dimensions where the available data allow the clearest examination of relationships are extensiveness (Don't Know Scores) and stability. On these dimensions, both a DK Score and a Stability Score based on identical items were available for the following content areas: Concept of Democracy, Image of Parties' Stands, Influence on Government, and Efficacy.[1]

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[1] Although Miscellaneous Party DK had been scored, because of format differences among the items no stability score was formed. The Stability Influence Score differs from the others in that those subjects who had given all DK responses (coded 0, not distinguishable from no response) were not scored on the Stability Influence Subscore.

The matrix of product moment correlations between DK and Stability Scores appears in the lower left hand portion of Table 1. These correlations were small and generally negative. They reached significance only for Influence on Government.

An examination of the distribution of Stability Scores for each DK group (Tables 5 through 8) reveals a curvilinear relationship between DK and Stability. For the subscores on Image of Parties' Stands, Concept of Democracy, and Efficacy, although the product moment correlation was not significant, the correlation ratio (an index of both linear and non-linear relationship) was significant at well beyond the .001 level and, accordingly, the departure from linearity was also highly significant. An examination of the mean Stability Score by Number of DK responses (also presented in these tables) indicates the source of these results. In each of these three sub-areas, the *highest* mean stability score was attained by the group which had responded *DK to all* questions on the first testing. The *second highest* mean stability score had been achieved by the group which had given *no DK responses* on Image of Parties' Stands and Concept of Democracy. (The same would have been true for Efficacy if groups giving four and five responses had been combined.) The *lowest* mean Parties' Stands Stability Score was achieved by those who had given *two Don't Knows* out of a possible five or six in each subscore. The decline in stability mean scores from 0 DK through 2 DK, and the rise from 2 DK to 5 or 6 DK showed no reversals in any of these subscores.

The stability of a response is apparently determined in part by the type of response. This may account for the limited relationship between Stability Scores on different dimensions. Children whose responses are most stable will be either those who gave all responses of DK (if they do not know

TABLE 5

SUMMARY OF RELATIONSHIP BETWEEN CONCEPT OF DEMOCRACY DON'T KNOW SCORE AND CONCEPT OF DEMOCRACY STABILITY SCORE

Number of Don't Know Responses	N	Mean Stability Score
0	330	4.39
1	85	3.49
2	77	2.95
3	60	2.98
4	40	3.23
5	30	4.07
6	131	5.05
Total	753	

Correlation ratio = .4245; $F(6, 746) = 27.35$; $p < .001$.

Product moment correlation = .0732; $F(1, 751) = 4.07$; non-significant.

Departure from linearity (curvilinearity); $F(5, 746) = 31.46$; $p < .001$.

TABLE 6

SUMMARY OF RELATIONSHIP BETWEEN EFFICACY DON'T KNOW SCORE AND EFFICACY STABILITY SCORE

Number of Don't Know Responses	N	Mean Stability Score
0	446	2.41
1	128	1.90
2	86	1.75
3	59	2.27
4	29	3.00
5	9	4.22
Total	757	

Correlation ratio = .2771; $F(5, 751) = 12.49$; $p < .001$.

Product moment correlation = .0206; $F(1, 755) = .30$; non-significant.

Departure from linearity (curvilinearity); $F(4, 751) = 15.53$; $p < .001$.

TABLE 7

SUMMARY OF RELATIONSHIP BETWEEN IMAGE OF PARTIES' STANDS DON'T KNOW SCORE AND IMAGE OF PARTIES' STANDS STABILITY SCORE

Number of Don't Know Responses	N	Mean Stability Score
0	380	4.12
1	122	3.52
2	70	2.70
3	50	2.98
4	27	3.22
5	29	3.90
6	49	5.06
Total	727	

Correlation ratio = .3353; $^{F}(6, 720) = 15.21$; $p < .001$.

Product moment correlation = -.0062; $^{F}(1, 725) = 0.00$; non-significant.

Departure from linearity (curvilinearity); $^{F}(5, 720) = 18.25$. $p < .001$.

TABLE 8

SUMMARY OF RELATIONSHIP BETWEEN INFLUENCE ON GOVERNMENT DON'T KNOW SCORE AND INFLUENCE ON GOVERNMENT STABILITY SCORE

Number of Don't Know Responses	N	Mean Stability Score
0	512	4.86
1	136	4.04
2	49	4.08
3	30	3.37
4	22	3.59
5, 6, 7, or 8	16	3.81
Total	765	

Correlation ratio (not computed).

Product moment correlation = -.2149; N = 765; $p < .001$.

on one occasion, they will be equally lacking in attitude on a second) or those who give no DK response (if they have an extensive attitude system).

The Influence Subscore showed the same trend (Table 8) if one takes into account that the group which would be expected to be most stable (all DK) was not scored on this Stability Subscore. The linear correlation is significant (negative) for this item pair. The highest stability score was achieved by those with no DK responses, the lowest by those with three DK responses out of eight. Although the extreme tail of the distribution is missing, the mean stability scores of those with four DK's and those with five, six, seven, or eight DK's were higher than the stability scores of those with three DK responses.

This is evidence that extensiveness is one of the most important dimensions of political attitude-concept systems in children. Children consistently respond Don't Know to political attitude items or they consistently give content responses. DK responses are also more stable on retest than are content responses. In Fiske's formulation (1957) the DK response possesses a particular kind of structure for the individual--not knowing about a topic [illegible] exists as a dimension apart from content dimensions.

The intercorrelations between stability scores reported here are appreciably lower than those reported by Faigin (1950) and by Fiske (1957). Their data were concentrated in the areas of personality and personal interests, and their subjects were adults (college students) not children; Fiske's data were based on stability across more than two trials.

It is interesting to speculate about the possible stages through which attitude-concept system development proceeds. The first stage may be a stable absence of attitude and information--the attitude-concept system is not extensive. The second stage may be characterized by the acquisition of attitudes which are unstable or in a state of flux. In the third, the acquired attitudes may have attained a reasonable degree of stability. This formulation can be tested only by the analysis of developmental trends in these two response dimensions.

Relationships between dimensions in the Democracy-Influence Attitude-Concept System

The correlations in Table 1 indicate that the three sub-areas grouped on the basis of content are not related to each other in any unitary fashion along the structural dimensions. Correlations between Efficacy DK, Influence DK, Concept of Democracy DK, Efficacy Stability, Influence Stability, Concept of Democracy DK were no higher than other correlations in this matrix.

Extensiveness, consistency, differentiation, and stability of political partisanship

Because of its importance in political theory, attitudes toward political parties were represented by a large number of items and by several structural dimensions: Don't Know Scores on Image Parties' Stands items and on a set of General Party items, Consistency of One's Own Affiliation with Image of Parties' Stands, and with Election Response, Image of Parties' Stands, Stability of Own Affiliation and Partisan Feelings, and Non-differentiation of Parties' Stands. The product moment correlations between all these items appear in Table 9. With the exception of the correlation between Don't Know Scores previously discussed, these correlations were not high and in most cases were not significant.

The correlation of .44 between Non-differentiation of Image of Parties' Stands and Stability of Parties' Stands indicates again the relationship between type of response and response stability. Responses of "both about the

TABLE 9

CORRELATIONS BETWEEN ITEMS CONCERNING POLITICAL PARTISANSHIP

Item	Party Non-differ.	Parties' Stands DK	General Party DK	Consist. Stands/ Affil.	Consist. Elect./ Affil.	Own Affil. Stability	Parties' Stands Stability
Party Non-differentiation							
Image of Parties' Stands DK	.02						
General Party DK	.12	.56					
Consistency of Image of Parties' Stands/ Affiliation	.09	-.06	.01				
Consistency Election/ Affiliation	-.03	-.03	-.06	.15			
Own Affiliation Stability	-.02	-.07	-.07	.15	.15		
Image of Parties' Stands Stability[a]	.44	.01	.03	.06	.12	.13	

Note: Range of N on which correlations based: 461 to 746, all Grade 4, 6, and 8 subjects who repeated test. For N of 450, a correlation of .12 reaches the .01 level of significance.

[a] This is a rescored stability score based upon the proportion of non-DK responses which were stable.

same" to questions about which party contributes most to the country were more stable than responses which attributed greater contributions to either the Democrats or the Republicans. The stability of a response should be evaluated with knowledge of what the response is. The Stability of Own Party Affiliation was related at a significant (though not high) level to both Consistency of Affiliation and Image of Parties' Stands and to Consistency of Affiliation and Response to 1960 Election.

The evidence does not support unitary organization of the attitude-concept systems surrounding political parties along all structural dimensions. Consistency of affiliation with other partisan attitudes, and stability of partisan attitudes were significantly related to each other. However, these correlations were not high, and the extensiveness of partisan attitudes and the ability to differentiate between parties did not show such relationships.

Conclusions About the Relationships Between Structural Dimensions

Attitude extensiveness is a general characteristic of all of an individual's attitude-concept systems, at least within the realm of politics. In this structured questionnaire, the correlations indicate that those who have limited attitudes in one content area also have limited attitudes in other political content areas. This lack of attitudinal response may be conceptualized on a number of levels of generality. Since the subjects of this investigation are children, lack of extensive information and attitudes is the most likely explanation for "Don't Know" responses. A more general explanation might focus on some children's greater caution or tentativeness in evaluating questions; there is no evidence that this is a better explanation than attitude extensiveness, however.

Seeing the choice of the "Don't Know" response alternative as a meaningful index of whether an attitude exists, rather than as the reflection of an irrelevant response choosing process, is supported by the heightened stability of this response when compared to content responses. The enhanced stability of the answer "Both parties the same" in response to the Parties' Stands Items also indicates the importance of distinguishing the kind of response when interpreting the stability or instability of a response on retest.

The low correlations among stability scales, although they may be determined in some small part by limited scale ranges (correlations were higher for scales such as Instability where the range was larger), suggest that the stability of a response may be specific to a single attitude-concept system or content area. However, this stability of responses within a single attitude-concept system is not strongly related to the development along other structural dimensions of the same system.

Within the political party attitude-concept system, correlations indicate that one of the most useful pieces of information is whether a child knows something about political parties or knows nothing about them. Another step in the developmental process appears to be the acquisition of a stable party identification of one's own. The image of political parties appears to be somewhat unclear throughout elementary school. Although the developmental changes which occur in these structural dimensions will be explored in the following section, for most children the partisan attitude-concept system does not possess a unitary degree of structure along all the dimensions.

In the attitude-concept system oriented around family and non-family authority figures, there is a more clear-cut set of relationships between structural dimensions. Judgmental processes regarding the father differ somewhat from those concerning political authority figures. The correlation of the Instability Scores for President with the Instability Scores for policeman was higher than the correlations of either of these scores with the Instability Score for Father; the correlations between Attribute Differentiation Scores for the President and these scores for the policeman were also higher than for either the President or the policeman scores with scores for the father. This suggests that there is a unitary character to the attitude-concept systems surrounding the policeman and President.

In summary, attitude extensiveness is the structural dimension which is most generalizable across attitude-concept systems; attitude stability must be interpreted more with reference to specific content areas. The attitude-concept systems surrounding Political Parties and that surrounding Democracy and Processes of Influence do not demonstrate strong coherence along structural dimensions. In making judgments about non-family figures who are known indirectly, the structure of attitude-concept systems (at least their stability and attribute differentiation) demonstrate somewhat greater unity. This may be due to the fact that these figures (the policeman and the President) are considerably more specific attitude objects than political parties or processes of influence.

Attitude Structure and Experience

> Question 2: Does the process of formulating answers to questions concerning an attitude object increase the structure of the corresponding attitude-concept system? Is this an aspect of the process by which attitudes become more structured?
>
> > Hypothesis 2: Experience gained from responding to an attitude instrument will increase the structure of attitudes expressed on a second administration of the same instrument.

One source of information about situations and experience which contribute to increased attitude structure comes from a comparison of responses on Test 1 with responses on Test 2. When attitude objects are vaguely known and may not have been put into the categories used in the ratings scales, the act of answering a questionnaire on the first administration may increase the crystallization of these attitudes, resulting in increased structure on the second administration.

The comparison of means on Test 1 with those on Test 2 is presented in Table 10. If the child simply acquires information as a result of taking the test, one would expect lower DK scores on the second testing. The only significant difference between DK scores was in the opposite direction, and the Total DK Score showed no significant difference. Greater partisan consistency on Test 2 had been predicted, and, in fact, the Consistency between Partisan Affiliation and Election Response was higher ($p < .01$). The score on Role Affiliation Differentiation for President was higher on the second test. In the case of Power/Affiliation Differentiation, the scores on the second test were higher than on the first for all three figures (father, policeman, President). The Differentiation of Father from President (object differentiation) was also significantly higher on the second test, in the direction of seeing the father as more concerned with one's welfare than the President. Experience in answering questions about authority figures contributes to the ability to make judgments of role and power which are independent of evaluation (attribute differentiation) and to differentiate between the affective ties with father and those with the President.

The Relationship Between Structural Dimensions and Grade, Intelligence, and Sex

Question 3: What is the relationship of structural dimensions to school grade? Does development occur in attitude structure during the elementary school years?

Question 4: How does attitude structure differ for children of high and low intelligence (with grade held constant)?

Question 5: How does attitude structure differ for boys and girls?

TABLE 10

COMPARISON OF MEAN SCORES ON TEST 1 AND TEST 2

	Mean 1	Mean 2	Diff.	P<	Direction
		Extensiveness			
Parties' Stands DK	1.33	1.29	.04	n.s.	
General Party DK	1.11	1.07	.04	n.s.	
Efficacy DK	.84	.98	.14	.01	Second test higher DK
Influence DK	.73	.72	.01	n.s.	
Definition of Democracy DK	2.01	1.96	.05	n.s.	
Total DK	7.08	7.15	.07	n.s.	
		Consistency			
Consistency Election Response/ Party Affiliation	2.46	2.56	.10	.01	Second test higher consistency
Consistency Image of Parties' Stands/Party Affiliation	2.49	2.52	.03	n.s.	

TABLE 10--Continued

	Mean 1	Mean 2	Diff.	P <	Direction
Attribute Differentiation					
Role/Affiliation President	-.09	1.61	1.70	.001	Second test higher differentiation
Role/Affiliation Policeman	.06	.30	.24	n.s.	
Role/Affiliation Father	.21	.38	.17	n.s.	
Power/Affiliation President	1.29	4.40	3.11	.001	Second test higher differentiation
Power/Affiliation Policeman	-.92	1.56	2.48	.001	Second test higher differentiation
Power/Affiliation Father	.04	1.91	1.87	.001	Second test higher differentiation
Object Differentiation					
Father/President Help	.74	.87	.13	.001	Second test father higher
Father/President Favorite	1.05	1.46	.41	.001	Second test father higher

Extensiveness

Hypothesis 3A: Attitude-concept systems will be more extensive for children of higher grade levels.

Hypothesis 4A: Attitude-concept systems will be more extensive for children with higher IQ's.

Hypothesis 5A: Boys will have more extensive attitude-concept systems than girls.

The dimension of extensiveness, as measured by all the Don't Know Subscores and by the Total Don't Know Score, was related significantly to grade, intelligence, and sex. For the Concept of Democracy, Image of Parties' Stands, and Efficacy, all three main effects were significant at the .001 level (Tables 11, 12, and 13). In each case, the extensiveness of expressed attitude was higher for older children, for more intelligent children and higher for boys than for girls (assessed in each case by the correspondence between extensive attitudes and few Don't Know responses). For the General Party Subscore grade and IQ effects were significant at the .001 level while the F-ratio associated with sex differences reached the .01 level (Table 14); for Influence Subscore, grade and IQ effects were significant at the .001 level, but the sex difference did not reach significance (Table 15).

The interaction between sex and grade was significant for all subscores at either the .01 or the .001 level. In each subscore this was accounted for by the decreasing magnitude (and in some cases reversal) of sex differences at higher grade levels. Differences between boys and girls in extensiveness of attitude-concept systems were striking only up to Grade 6. Thereafter they declined. Three of the five subscores (Concept of Democracy, Efficacy, and General Party Attitudes) also showed significant interactions between grade

TABLE 11

ANALYSIS OF VARIANCE OF CONCEPT OF DEMOCRACY DON'T KNOW, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects			
	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 4 Grades 5 to 6 Grades 7 to 8	2.90 1.68 .70	603.74	2,7399	.001
Low IQ Medium IQ High IQ	1.95 1.79 1.54	50.04	2,7399	.001
Boys Girls	1.54 1.98	56.43	1,7399	.001

Interactions

	Grade and IQ[b,c]			Grade and Sex[b,d]	
	Low IQ	Medium IQ	High IQ	Boys	Girls
Grade 4 Grades 5 to 6 Grades 7 to 8	2.72 2.01 1.12	3.01 1.68 .69	2.96 1.36 .30	2.56 1.45 .59	3.23 1.91 .81

[a] Mean number of DK responses.

[b] Significant, $p < .001$.

[c] In Grade 4, high IQ and medium IQ children give slightly more, rather than fewer, DK responses than low IQ children.

[d] At Grades 7 to 8 the sex difference in number of DK's is considerably less pronounced than at the earlier grade levels.

TABLE 12

ANALYSIS OF VARIANCE OF IMAGE OF PARTIES' STANDS DON'T KNOW, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects			
	Main Effects Means[a]	F Ratio for Main Effect	df	p<
Grades 3 to 4	1.72	119.80	2,7399	.001
Grades 5 to 6	1.14			
Grades 7 to 8	.86			
Low IQ	1.49	53.56	2,7399	.001
Medium IQ	1.24			
High IQ	.98			
Boys	1.11	11.70	1,7399	.001
Girls	1.36			

	Interaction Between Grade and Sex[b,c]	
	Boys	Girls
Grade 4	1.46	1.97
Grades 5 to 6	1.03	1.24
Grades 7 to 8	.85	.87

---

[a] Mean number of DK responses.

[b] Significant, p < .001.

[c] At Grades 7 to 8 there is no appreciable sex difference.

TABLE 13

ANALYSIS OF VARIANCE OF EFFICACY DON'T KNOW, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects			
	Main Effects Means[a]	F Ratio for Main Effects	df	p<
Grades 3 to 4	1.19	259.01	2,7646	.001
Grades 5 to 6	.67			
Grades 7 to 8	.43			
Low IQ	.86	29.46	2,7646	.001
Medium IQ	.79			
High IQ	.64			
Boys	.69	16.61	1,7646	.001
Girls	.83			

Interactions

	Grade and IQ[b,c]			Grade and Sex[b,d]	
	Low IQ	Medium IQ	High IQ	Boys	Girls
Grades 3 to 4	1.17	1.22	1.17	1.01	1.36
Grades 5 to 6	.85	.69	.45	.62	.72
Grades 7 to 8	.55	.45	.29	.44	.42

[a] Mean number of DK responses.

[b] Significant, p < .001

[c] In Grades 3 to 4 there is no difference between IQ groups in number of DK responses given.

[d] At Grades 7 to 8 the sex difference is reversed, with boys giving slightly more DK responses.

TABLE 14

ANALYSIS OF VARIANCE OF GENERAL PARTY DON'T KNOW, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects			
	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 4 Grades 5 to 6 Grades 7 to 8	1.45 .92 .73	174.79	2,7399	.001
Low IQ Medium IQ High IQ	1.15 1.07 .87	40.14	2,7399	.001
Boys Girls	.96 1.10	8.83	1,7399	.01

Interactions

	Grade and IQ[b,d]			Grade and Sex[c,e]	
	Low IQ	Medium IQ	High IQ	Boys	Girls
Grade 4 Grades 5 to 6 Grades 7 to 8	1.46 1.15 .84	1.59 .89 .74	1.29 .72 .60	1.31 .85 .73	1.58 .99 .73

[a] Mean number of DK responses.

[b] Significant, $p < .001$. [c] Significant, $p < .01$.

[d] At Grade 4 the greatest number of DK responses is given by the medium IQ group.

[e] At Grades 7 to 8 there is no sex difference in number of DK responses.

TABLE 15

ANALYSIS OF VARIANCE OF INFLUENCE ON GOVERNMENT DON'T KNOW, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects			
	Main Effects Means[a]	F Ratio for Main Effect	df	p<
Grade 4	.88	160.72	2,7399	.001
Grades 5 to 6	.47			
Grades 7 to 8	.24			
Low IQ	.61	18.56	2,7399	.001
Medium IQ	.55			
High IQ	.43			
Boys	.49	1.57	1,7399	n.s.
Girls	.58			
	Interaction Between Grade and Sex[b,c]			
	Boys	Girls		
Grade 4	.78	.99		
Grades 5 to 6	.43	.52		
Grades 7 to 8	.27	.22		

[a] Mean number of DK responses.

[b] Significant, p < .001.

[c] At Grades 7 to 8 the sex difference is reversed, with boys giving slightly more DK responses.

and intelligence. This was produced in each case by the elevation of Don't Know Scores in the medium IQ group at the Grade 3 to 4 level.

Table 16 presents the Total DK Score which summarizes these findings. The grade effect is clearly the most striking--mean DK score at Grade 4 was 9.43 and at Grade 7 to 8 was 3.91. The IQ effect was also sizeable, mean DK Score for the low IQ group being 7.18 and for the high IQ group, 5.51. The difference between boys and girls was less pronounced though also highly significant; boys had a mean DK score of 5.87 and girls of 7.03. The significant interaction between grade and IQ was accounted for by the high DK score of the medium-IQ group at Grade 4 (10.13); the grade by sex interaction was due to the diminished difference between boys and girls at Grades 7 to 8 (boys' mean 3.85; girls' mean 3.97).

The acquisition of attitudes appears to proceed in all political attitude-concept systems at approximately the same rate. There is no evidence that extensiveness of attitudes increases in some attitude-concept systems but not in others during elementary school.

All three hypotheses were confirmed with respect to the dimension of extensiveness as measured by Don't Know scores. This is a generalized structural dimension along which attitude development occurs with grade and for which development occurs more rapidly in children who are more intelligent. During the early elementary grades, boys are accelerated in the acquisition of attitudes, but this difference has nearly disappeared by Grade 7.

Stability

Hypothesis 3B: Attitude-concept systems will be more stable for children of higher grade levels.

Hypothesis 4B: Attitude-concept systems will be more stable for children with higher IQ's.

Hypothesis 5B: Girls will have more stable attitude-concept systems than boys.

TABLE 16

ANALYSIS OF VARIANCE OF TOTAL DON'T KNOW, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p<
Grade 4	9.43	403.10	2,7399	.001
Grades 5 to 6	6.00			
Grades 7 to 8	3.91			
Low IQ	7.18	65.10	2,7399	.001
Medium IQ	6.66			
High IQ	5.51			
Boys	5.87	28.89	1,7399	.001
Girls	7.03			

Interactions

	Grade and IQ[b,c]			Grade and Sex[b,d]	
	Low IQ	Medium IQ	High IQ	Boys	Girls
Grade 4	9.26	10.13	8.90	8.33	10.53
Grades 5 to 6	7.27	5.90	4.82	5.43	6.57
Grades 7 to 8	5.00	3.95	2.79	3.85	3.97

[a] Mean number of DK responses.

[b] Significant, $p < .001$.

[c] At Grade 4 the largest number of Don't Know responses is given by the medium IQ group.

[d] At Grades 7 to 8 the sex difference in number of Don't Know responses is considerably less pronounced than at earlier grade levels.

Data indicating that the extensiveness of attitude-concept systems increases with grade and IQ (measured by decline in number of DK responses) and that there is curvilinear relationship between the number of Don't Know responses and the stability of responses have been presented in previous sections. It has also been suggested that there may be three stages in the development of an attitude-concept system; first, the stable absence of an attitudinal response; second, the acquisition of attitudes which are unstable or in a state of flux; third, the presence of attitudes which have a reasonable degree of stability. Table 17 and Table 18 present the percentages of individuals at each grade level who were classified in the following typologies in the content areas Concept of Democracy and Image of Parties' Stands: No DK and Low (below median) Stability Score; No DK and High (above median) Stability Score; Medium (one to four) DK and High (above median) Stability Score; High (five or six) DK and High (above median) Stability Score. These content areas were chosen for this analysis because there were a sufficient number of subjects who had given DK responses to make group size reasonable.

Because of the curvilinear relationship between extensiveness and stability, certain typologies (e.g., Medium DK and High Stability) were represented particularly infrequently. However, the changes by grade in modal response are consistent with the existence of three stages in attitude development.

For the Concept of Democracy score (Table 17), the two types represented most frequently at Grade 4 were Medium DK/Low Stability and High DK/High Stability. In this attitude-concept system, fourth graders were most likely either to report in a stable fashion that they had no attitudes or to express attitudes which were of an unstable nature. Among sixth graders the most frequent types were Medium DK/Low Stability and No DK/High Stability. While many sixth graders have only partially developed attitudes, a large proportion have developed

TABLE 17

CHANGES BY GRADE IN DISTRIBUTION OF TYPOLOGIES OF DEMOCRACY STABILITY AND EXTENSIVENESS

Group	N	0 DK		1-4 DK		5-6 DK	
		% Below Median Stability	% Above Median Stability	% Below Median Stability	% Above Median Stability	% Below Median Stability	% Above Median Stability
Grade 4	391	18.93	7.42	34.78	5.88	6.64	26.36
Grade 6	207	20.77	26.09	30.43	8.70	3.86	10.14
Grade 8	155	22.58	61.29	11.61	2.58	0.00	1.94

TABLE 18

CHANGES BY GRADE IN DISTRIBUTION OF TYPOLOGIES OF IMAGE OF PARTIES' STANDS STABILITY AND EXTENSIVENESS

Group	N	0 DK		1-4 DK		5-6 DK	
		% Below Median Stability	% Above Median Stability	% Below Median Stability	% Above Median Stability	% Below Median Stability	% Above Median Stability
Grade 4	354	24.58	22.60	33.62	5.37	3.67	10.17
Grade 6	213	24.88	26.29	27.23	11.27	2.82	7.51
Grade 8	160	30.63	34.38	25.63	5.00	3.12	1.25

extensive attitude-concept systems which are stable; in other words, they have reached the third stage of attitude development. By Grade 8, the overwhelming majority of the group (61.29 per cent) gave no DK responses and showed high stability. Less than 2 per cent of eighth graders were classified in the High DK/High Stability pattern characteristic of fourth graders.

To summarize, in the attitude-concept system oriented around concepts of democracy there is a sharp rise with grade in the percentage of children who have extensive and stable attitudes, and a corresponding fall in the percentage who have a stable lack of attitudinal responses and in the percentage who express attitudes which are unstable.

The pattern is not so clear in the Image of Parties' Stands (Table 18). There is a corresponding increase with grade in the proportion of children with extensive and stable expressed attitudes (Stage 3)--22.60 per cent of fourth graders, increasing to 34.38 per cent of eighth graders--but it is not so striking as the change noted in the Concept of Democracy. There is a similar decline in the percentage with High DK/High Stability (from 10.17 per cent at Grade 4 to 1.25 per cent at Grade 8) and a decline in the intermediate group Medium DK/Low Stability (from 33.62 per cent at Grade 4 to 25.63 per cent at Grade 8).

This suggests, though it is certainly not conclusive, that conceptualizing the development of attitude-concept systems through the three stages mentioned is valid for conceptions of democracy but is not so clearly the progression when the subject matter involves the recognition of the political parties' stands on issues.

Considering the curvilinear relationship between stability and Don't Know previously reported, it seemed desirable to use a Stability Score which would take into account the kind of responses which was stable. Rescored

Stability Scores were formed to eliminate the contamination by Don't Know and to assess the stability of content responses alone. If a child had answered DK or failed to respond to half or more of the items in a subscale, he was not given a stability score for that subscale. If he had given a content response to more than half of the items, his stability score was computed on the basis of those content response alone (not including DK) and consisted of the percentage of content responses which were stable on retest. The correlations between these rescored stability scores and the original stability scores were all above .90, differing only by the fact that individuals who had answered DK to half of the items had not been scored.

Stability in three political attitude-concept systems

Summaries of the three-way analysis of variance conducted with the five basic rescored stability scores are presented in Tables 19 to 23.

The F ratios for variance due to grade were significant at the .001 level for Rescored Stability of Definition of Democracy, for Rescored Stability of Efficacy, and for Stability of Own Partisan Affiliation. An examination of the means indicates that this was due to the increased proportion of items which were stable for older children. Although the trend in means by grade was the same for Rescored Stability of Parties' Stands (Table 22) and for Rescored Stability of Influence on Government (Table 23)--i.e., Grade 4 less stable than Grade 6, and this in turn less stable than Grade 8--the F ratios for the grade effect did not reach significance.

Out of the five subscores, only the Rescored Stability of Efficacy was related significantly ($p < .01$) to intelligence. The ordering of means was as predicted for Rescored Stability of Influence on Government and for Rescored Stability of Concept of Democracy, but the F ratios did not reach significance.

TABLE 19

ANALYSIS OF VARIANCE OF RESCORED STABILITY OF CONCEPT OF DEMOCRACY SCORES, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 4 Grade 6 Grade 8	35.56 40.09 42.79	16.94	2,365	.001
Low IQ Medium IQ High IQ	37.66 39.49 41.28	4.49	2,365	n.s.
Boys Girls	38.68 40.28	5.87	1,365	n.s.

Note: No significant interactions.

[a] The higher the score, the greater the percentage of responses identical on test and retest. These means may be translated to proportion of stable items by multiplying by two, and then subtracting one.

TABLE 20

ANALYSIS OF VARIANCE OF RESCORED STABILITY OF EFFICACY ITEMS, BY GRADE, INTELLIGENCE AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p<
Grade 4 Grade 6 Grade 8	23.58 28.29 29.99	12.27	2,499	.001
Low IQ Medium IQ High IQ	25.48 26.49 29.91	4.62	2,499	.01
Boys Girls	27.40 27.18	.23	1,499	n.s.

Note: No significant interactions.

[a] The higher the score, the greater the percentage of responses identical on test and retest. These means may be translated to proportion of stable items by multiplying by two, and then subtracting one.

TABLE 21

ANALYSIS OF VARIANCE OF STABILITY OF OWN PARTISAN AFFILIATION, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 4 Grade 6 Grade 8	1.28 1.48 1.54	7.88	2,587	.001
Low IQ Medium IQ High IQ	1.42 1.43 1.44	.53	2,587	n.s.
Boys Girls	1.42 1.44	.08	1,587	n.s.

Note: No significant interactions.

[a] Number of items stable out of two.

TABLE 22

ANALYSIS OF VARIANCE OF RESCORED STABILITY OF IMAGE OF PARTIES' STANDS ITEMS, BY GRADE, INTELLIGENCE AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p<
Grade 4	36.01			
Grade 6	38.65	2.45	2,449	n.s.
Grade 8	39.91			
Low IQ	38.13			
Medium IQ	36.10	3.26	2,449	n.s.
High IQ	40.34			
Boys	37.47	1.47	1,449	n.s.
Girls	38.91			

Note: No significant interactions.

[a] The higher the score, the greater the percentage of responses identical on test and retest. These means may be translated to proportion of stable items by multiplying by two, and then subtracting one.

TABLE 23

ANALYSIS OF VARIANCE OF RESCORED STABILITY OF INFLUENCE ON GOVERNMENT ITEMS, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 4	30.50	3.08	2,604	n.s.
Grade 6	31.66			
Grade 8	33.20			
Low IQ	29.79	3.83	2,604	n.s.
Medium IQ	32.00			
High IQ	33.56			
Boys	31.54	3.01	1,604	n.s.
Girls	32.03			

Note: No significant interactions.

[a] See Chapter II for description of scoring. The higher the score, the greater the percentage of responses identical on test and retest. These means may be translated to proportion of stable items by multiplying by two, and then subtracting one.

None of the tests of sex differences as main effects reached significance though all were in the predicted direction, with girls more stable than boys. There were no significant interactions.

In summary, the stability of responses shows clear-cut development with increasing grade for three of the subscores: the concept of democracy, the perception of an individual citizen's efficacy, and the ego-involving acceptance of a particular partisan orientation. In the elaboration of the partisan attitude-concept systems to include conflicts and differences between the political parties and in assessing pressure group influence upon the law-making process, there was no significant increase in stability with grade. Intelligence was related only to the Stability of Efficacy subscore, and sex was not significantly related to any of the subscores.

Attitude stability is least important as a structural developmental dimension for those two content areas which are least visible to the child and which are emphasized least in the school curriculum: pressure group influences on law making and the issue conflict between political parties (see Hess and Torney, 1965, for a discussion of curriculum in these areas). Stability is much more relevant as a developmental structural dimension in the concept of democracy, conception of the responsiveness of the government to individual effort (efficacy), and in the individual's assumption of a partisan affiliation for himself. The content of the first two attitude-concept systems receives particular stress in the school curriculum; taking on a partisan identification and reacting to the outcome of an election receive wide support in the culture. The more specific aspects of influence (pressure groups) and partisan conflict do not receive such support and apparently do not become stable parts of attitude-concept systems during elementary school. Increase or lack of increase in the stability of a particular portion of an attitude-concept system may give clues about the order of development within that system as well as indicating the influence of particular socializing forces (school curriculum, family experience).

On the whole, there is limited but not conclusive evidence of the usefulness of *stability* as a developmental structural dimension of attitude-concept system development in specific aspects of systems oriented around the democratic process and partisanship.

Stability in judgments of political and non-political authority figures

In judgments of political and non-political authority figures, development along the structural dimension of stability is more clear-cut than in the areas presented in the previous section. For the Non-family Stability Scores, the Presidential Instability Score, and Father Instability Score (Tables 24, 25, and 26), the F ratios associated with the grade effect were significant at the .001 level, while for Policeman Instability the grade effect reached significance at the .01 level (Table 27). In each case stability increased with grade. Increases of the greatest magnitude occurred between Grade 2 and Grade 4. On the Father Instability and Policeman Instability Scores, sixth graders demonstrated as much stability as eighth graders. It is not possible to compare these results directly with those cited previously, since these figure instability scores were the only indices of stability which could be scored at the second grade level. But it appears that between the second and fourth grade a considerable amount of structuring occurs along the *stability* dimension of attitude-concept systems. In the highly relevant attitude-concept systems concerning figures with whom the child has had personal contact (father and policeman), maximum structure has been attained by the sixth grade. For the President and for other non-family figures which have more explicitly political

TABLE 24

ANALYSIS OF VARIANCE OF STABILITY OF NON-FAMILY AUTHORITY ITEMS, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effect Means[a]	F Ratio for Main Effect	df	$p <$
Grade 4 Grade 6 Grade 8	20.12 21.83 22.29	8.99	2,537	.001
Low IQ Medium IQ High IQ	20.34 21.17 22.73	9.07	2,537	.001
Boys Girls	20.98 21.85	6.06	1,537	n.s.

Note: No significant interactions.

[a] Number of responses identical on retest for forty-one items.

TABLE 25

ANALYSIS OF VARIANCE OF INSTABILITY OF PRESIDENT ITEMS, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects			
	Main Effects Means[a]	F Ratio for Main Effect	df	p<
Grade 2	4.84	7.15	3,813	.001
Grade 4	4.14			
Grade 6	3.97			
Grade 8	3.70			
Low IQ	4.55	5.45	2,813	.001
Medium IQ	4.14			
High IQ	3.79			
Boys	4.10	.32	1,813	n.s.
Girls	4.23			
	Interaction Between IQ and Sex[b,c]			
	Boys	Girls		
Low IQ	4.18	4.93		
Medium IQ	4.09	4.20		
High IQ	4.02	3.57		

[a] Sum of absolute value of differences between response on Test 1 and on Test 2 for six questions.

[b] $P < .01$.

[c] Sex differences reversed in high IQ group.

TABLE 26

ANALYSIS OF VARIANCE OF INSTABILITY OF FATHER
ITEMS, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 2 Grade 4 Grade 6 Grade 8	4.36 3.47 2.46 2.78	15.28	3,725	.001
Low IQ Medium IQ High IQ	3.52 3.34 2.94	8.16	2,725	.001
Boys Girls	3.29 3.24	1.14	1,725	n.s.

Note: No significant interactions.

[a] Sum of absolute value of differences between response on Test 1 and on Test 2 for six questions.

TABLE 27

ANALYSIS OF VARIANCE OF INSTABILITY OF POLICEMAN ITEMS, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 2 Grade 4 Grade 6 Grade 8	5.17 4.68 4.33 4.33	4.54	3,813	.01
Low IQ Medium IQ High IQ	5.09 4.56 4.23	8.17	2,813	.001
Boys Girls	4.71 4.54	1.17	1,813	n.s.

Note: No significant interactions.

Sum of absolute value of differences between response on Test 1 and Test 2 for six questions.

relevance,[1] structural development along the stability dimension is in progress at least until the eighth grade. This result would have been more clear-cut conceptually if the policeman had not been included in the Non-family Score and it had been more clearly a Political Figure Score.

The F ratios associated with intelligence as a main effect reached significance at the .001 level for the three Instability Scores and for the Non-family Stability Score; the means achieved by the low IQ group showed less stability in every case than the means of the higher two groups. None of the F ratios associated with differences between boys and girls was significant. A two-way interaction between IQ and sex on the President Instability Score was significant at the .01 level. The low IQ girls were the more unstable group while the high IQ girls demonstrated the highest stability.

In summary, in attitude-concept systems surrounding personal figures, there appears to be considerable development along the structural dimension of stability. Children of different intelligence levels also differ in the stability of attitudes to authority.

Object Differentiation in Judgments of Political and Non-political Authority Figures

> Hypothesis 3C: The objects around which attitude-concept systems are oriented will be more differentiated for children of higher grade levels.
>
> Hypothesis 4C: The objects around which attitude-concept systems are oriented will be more differentiated for children with higher IQ's.
>
> Hypothesis 5C: The objects around which attitude-concept systems are oriented will be more differentiated for boys.

The dimension of object differentiation depends upon assumptions about the role of the affective process in the development of attitudes toward persons, in this case figures of authority. The ability to specialise the father's role, by differentiating between the father and the President as sources of affective gratification, is an example of the way in which the original process of generalising attitudes to distant objects from attitudes toward known objects is modified by the subsequent separation of these attitude-concept systems.

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[1] Score included Senator, Supreme Court, and Government, as well as President and policeman.

For the Differentiation Score on the dimension "Is My Favorite," the F ratios associated with all three main effects (grade, intelligence, and sex) were significant at the .001 level and the means were ordered in the predicted direction (Table 28). On the dimension "Would always want to help me if I needed it," the grade and IQ effects were significant at the .001 level, but the sex affect was not (Table 29). Clearly with grade, and especially in the case of brighter children, there is an increase in the ability to differentiate between father's role as an affective or affiliative one and the non-emotional role relationship with the President. The strong affective feelings which develop for the President by generalization from similar feelings about the father are modified, and the attitude-concept system for the President becomes detached from that for the father.

The difference between boys and girls may be explained by the more personalized feelings which girls have for figures of authority. This difference is particularly marked at the later grade levels, suggesting that the process by which attitudes toward the President are formed may not differ for boys and girls, but that girls retain generalized and undifferentiated views longer than boys.

Attribute Differentiation in Judgments of Political and Non-political Authority Figures

> Hypothesis 3D: In judgments of persons and social objects, where group identification is not important (e.g., ratings of policemen and President), the differentiation of role and power attributes will be greater

TABLE 28

ANALYSIS OF VARIANCE OF PRESIDENT-FATHER DIFFERENTIATION ON FAVORITE, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects			
	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grades 3 to 4 Grades 5 to 6 Grades 7 to 8	1.00 1.39 1.55	60.57	2,7646	.001
Low IQ Medium IQ High IQ	1.05 1.37 1.52	47.75	2,7646	.001
Boys Girls	1.40 1.22	13.56	1,7646	.001

	Interaction Between Sex and Grade[b,c]	
	Boys	Girls
Grades 3 to 4 Grades 5 to 6 Grades 7 to 8	1.02 1.45 1.73	.98 1.33 1.36

[a] The higher the score, the more father's affiliative role is differentiated from the President's. Zero score would represent lack of any differentiation, and negative scores would indicate the rating of President higher than father.

[b] Significant, $p < .01$.

[c] At Grades 3 to 4 the sex differences are much less pronounced than at the later grade levels.

TABLE 29

ANALYSIS OF VARIANCE OF PRESIDENT-FATHER DIFFERENTIATION ON HELPS, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p<
Grades 3 to 4 Grades 5 to 6 Grades 7 to 8	.59 .93 1.09	72.90	2,7646	.001
Low IQ Medium IQ High IQ	.68 .89 1.04	36.08	2,7646	.001
Boys Girls	.88 .86	.19	1,7646	n.s.

Note: No significant interactions.

[a] The higher the score, the more father's role is differentiated from the President's. Zero score would represent lack of any differentiation, and negative scores would indicate the rating of President higher than father.

> for children of higher grade levels. In judgments of the father where the affective relationship remains primary, attribute differentiation will not be greater for children of higher grade levels.
>
> Hypothesis 4D: In judgments of persons and social objects where group identification is not important (e.g., ratings of policeman and President), the differentiation of role and power attributes from affiliation will be greater for children with higher IQ's. In judgments of the father, attribute differentiation will not vary with IQ.
>
> Hypothesis 5D: In judgments of persons and social objects, where group identification is not important (e.g., ratings of policeman, President, and father) the differentiation of role and power attributes from affiliation will be greater for boys.

The dimension of attribute differentiation in the judgment of personal figures is concerned with the relationship between different evaluations and beliefs within a single attitude-concept system rather than with the separateness of different attitude-concept systems. It was predicted that the ability to make positive ratings of role performance and power which are not dependent upon strong affective ties would increase with age and intelligence for non-family figures. Because of the enduring nature of the affective relationship with the father, no differences by grade or by intelligence were expected. Girls were expected to stress the personal evaluative dimensions more in judging both family and non-family figures.

The Differentiation of Role/Affiliation for the President increased significantly with grade and was developed earlier among those of higher intelligence (p for both effects less than .001, see Table 30).[1] The sex effect was not significant. For the Differentiation of Power/Affiliation for the President, only the IQ effect was significant (p less than .001, see Table 31).

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[1] The discrepancy of the grand mean of these scores from 0 results from the use of the total Grade 4 through Grade 8 group in determining the means and variances used in the standard scoring. The group upon which the analysis of variance was performed included only children who had responded to all questions and children for whom an IQ score was available.

TABLE 30

ANALYSIS OF VARIANCE OF DIFFERENTIATION OF ROLE FROM AFFILIATION FOR PRESIDENT, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 4 Grades 5 to 6 Grades 7 to 8	-1.34 .06 2.82	90.49	2,6324	.001
Low IQ Medium IQ High IQ	- .82 .94 1.43	25.92	2,6324	.001
Boys Girls	.84 .19	1.08	1,6324	n.s.

Note: No significant interactions.

[a] A score of 0 indicates that the role and the affiliation items are rated at the same standard score position; a negative score indicates that the affiliative item is rated higher than the role items, and a positive score that the role items are rated higher than the affiliative item.

TABLE 31

ANALYSIS OF VARIANCE OF DIFFERENTIATION OF POWER FROM AFFILIATION FOR PRESIDENT, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects			
	Main Effects Means[a]	F Ratio for Main Effect	df	p<
Grade 4	.37	3.72	2,6324	n.s.
Grades 5 to 6	.60			
Grades 7 to 8	1.08			
Low IQ	- .34	10.79	2,6324	.001
Medium IQ	1.00			
High IQ	1.39			
Boys	.78	.08	1,6324	n.s.
Girls	.59			

	Interaction Between Sex and IQ[b,c]	
	Boys	Girls
Low IQ	.21	- .90
Medium IQ	1.07	.94
High IQ	1.05	1.74

---

[a] A score of 0 indicates that the power and the affiliation items are rated at the same standard score position; a negative score indicates that the affiliative item is rated higher than the power items, and a positive score that the power items are rated higher than the affiliative item.

[b] Significant, $p < .01$.

[c] In high IQ group power is rated higher by girls than by boys. In other groups the opposite is true.

Although the F-ratio, associated with the main effect for sex was not significant, the interaction between sex and IQ was significant at the .01 level. As predicted, girls were less able to make judgments distinguishing between power and affiliation in the low and medium IQ groups. In the high IQ group, however, the opposite was true; girls were more capable than boys of making ratings of power distinct from their affective feelings.

For the policeman, both Role/Affiliation Differentiation and Power/Affiliation Differentiation showed significant relationships ($p < .001$) to grade and to IQ (see Tables 32 and 33). The difference between boys and girls was significant in the predicted direction at the .01 level for Differentiation of Power/Affiliation, with girls obtaining lower Differentiation Scores.

In summary, the hypotheses about the relationship of grade and IQ to the ability to hold beliefs about the positive competence and power of authority figures which are not dependent upon affection feelings were confirmed for three out of four of the subscores for President and policeman. The sex difference was not as clear-cut, although significant in the predicted direction for the policeman on Power/Affiliation Differentiation.

Because of the close personal relationship between parent and children, it was predicted that differentiation of affection from role or from power would not be a developmental dimension of the attitude-concept system for father. However, the Differentiation of Role/Affiliation for father demonstrated a relationship at the .01 level to grade and a significant interaction ($p < .01$) between grade and intelligence (Table 34). In Grades 4 and 6, more intelligent children judged that the father was relatively high on affective qualities in comparison to role qualities; in Grades 7 and 8, more intelligent children judged with more differentiation. The Differentiation of Power/Affiliation for father (Table 35) was significantly related to grade ($p < .001$), showing increased differentiation

TABLE 32

ANALYSIS OF VARIANCE OF DIFFERENTIATION OF ROLE FROM AFFILIATION FOR POLICEMAN, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 4	-2.16	165.55	2,6324	.001
Grades 5 to 6	.21			
Grades 7 to 8	3.50			
Low IQ	- .44	26.58	2,6324	.001
Medium IQ	.22			
High IQ	1.76			
Boys	.84	3.66	2,6324	n.s.
Girls	.19			

Note: No significant interactions.

[a] A score of 0 indicates that the role and the affiliation items are rated at the same standard score position; a negative score indicates that the affiliative item is rated higher than the role items, and a positive score that the role items are rated higher than the affiliative item.

TABLE 33

ANALYSIS OF VARIANCE OF DIFFERENTIATION OF POWER FROM AFFILIATION FOR POLICEMAN, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 4	-2.97	200.26	2,6324	.001
Grades 5 to 6	.20			
Grades 7 to 8	3.73			
Low IQ	- .81	25.01	2,6324	.001
Medium IQ	.22			
High IQ	1.54			
Boys	.79	8.74	1,6324	.01
Girls	- .16			

Note: No significant interactions.

[a] A score of 0 indicates that the power and the affiliation items are rated at the same standard score position; a negative score indicates that the affiliative item is rated higher than the power items, and appositive score that the power items are rated higher than the affiliative item.

TABLE 34

ANALYSIS OF VARIANCE OF DIFFERENTIATION OF ROLE FROM AFFILIATION FOR FATHER, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects			
	Main Effects Means[a]	F Ratio for Main Effect	df	p<
Grade 4 Grades 5 to 6 Grades 7 to 8	-.73 -.59 .39	6.32	2,6324	.01
Low IQ Medium IQ High IQ	.08 -.59 -.42	1.84	2,6324	n.s.
Boys Girls	-.42 -.20	1.93	1,6324	n.s.
	Interaction Between Grade and IQ[b,c]			
	Low IQ	Medium IQ	High IQ	
Grade 4 Grades 5 to 6 Grades 7 to 8	.30 .10 -.16	-1.27 - .81 .32	-1.23 -1.06 1.02	

[a] A score of 0 indicates that the role and the affiliation items are rated at the same standard score position; a negative score indicates that the affiliative item is rated higher than the role items and a positive score that the role items are rated higher than the affiliative item.

[b] Significant, $p < .01$.

[c] In Grades 4 to 6 more intelligent children judge the father relatively high on affective qualities in comparison to role qualities. In Grades 7 to 8 the opposite is true.

TABLE 35

ANALYSIS OF VARIANCE OF DIFFERENTIATION OF POWER FROM AFFILIATION FOR FATHER, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p<
Grade 4	- .74	11.26	2,6324	.001
Grades 5 to 6	- .71			
Grades 7 to 8	.72			
Low IQ	.00	1.11	2,6324	n.s.
Medium IQ	- .32			
High IQ	- .49			
Boys	-1.00	28.27	1,6324	.001
Girls	.51			

Note: No significant interactions.

[a] A score of 0 indicates that the power and the affiliation items are rated at the same standard score position; a negative score indicates that the affiliative item is rated higher than the power items, and a positive score that the power items are rated higher than the affiliative item.

with age, and to sex, with girls demonstrating more differentiation (also contrary to prediction).

The power dimension and its differentiation from affiliation appears to be particularly salient in distinguishing between boys and girls; the relative use of these dimensions differs for family and non-family figures. Girls, in forming attitudes toward non-family figures, not only depend more on affective ties and on generalization (as demonstrated by the Object Differentiation Scores) but also may compensate for feelings of vulnerability in response to distant powerful figures by seeing them as affectively close. The opposite is true for boys, who have higher Attribute Differentiation Scores for non-family figures and lower scores when rating their fathers.

Differentiation and Consistency in Attitudes Toward Political Parties

> Hypothesis 3E: In attitude areas where identification with a group is important (e.g., political party) the elements of attitude-concept systems will be more consistent for children of higher grade levels.
>
> Hypothesis 4E: In attitude areas where identification with a group is important (e.g., political party) the elements of attitude-concept systems will be more consistent for children with higher IQ's.
>
> Hypothesis 5E: In attitude areas where identification with a group is important (e.g., political party) the elements of attitude-concept systems will be more consistent for girls.

In the attitude-concept systems surrounding political parties the low level of relationship between structural dimensions such as consistency, differentiation, and stability was documented in an earlier section. It is clear that the development of partisanship for most children is not a unitary phenomenon nor does it result by the end of the elementary grades in the type of partisan attitudes characteristic of adults. The extensiveness of attitudes toward political parties was demonstrated to increase with age and to be one of the most crucial structural dimensions along which attitude development occurs (see

Tables 12 and 14). The stability of attitudes about the parties' stands on issues did not increase significantly with grade or with IQ although the stability of a child's own reported affiliation did increase with grade (see Tables 21 and 22). With increasing grade, two types of development do occur within the partisan attitude-concept system: more attitudes are expressed about political parties, and the child states partisan affiliation which is stable over time.

A third developmental trend in these data is the increase with grade in one particular kind of consistency--between one's stated party affiliation and one's response to the election of the candidate favored by or supported by his political party (Table 36). This mean consistency score increased with grade (F ratio significant, $p < .001$) and with IQ ($p < .001$). There were no sex differences in this consistency. Stable affiliation, stable reports of election reactions, and election reactions which are consistent with partisan affiliation develop during elementary school. In other words, the attitude-concept system surrounding political parties has these particular developmental structural aspects.

The remainder of information concerning children's partisan affiliation must be evaluated in light of a striking and somewhat unexpected finding with regard to the content of political party attitudes (discussed more fully in Hess and Torney, 1965). Older elementary school children have a particularly great tendency to report themselves independent of political party--"sometimes a Democrat and sometimes a Republican." There is a corresponding increase with grade in the belief that adults should vote for the best man, though this may not be the man their party supports, and in the belief that children should not adopt their parents' partisan orientations (Hess and Torney, 1965).

TABLE 36

ANALYSIS OF VARIANCE OF CONSISTENCY OF PARTY AFFILIATION AND RESPONSE TO ELECTION, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p<
Grades 3 to 4	2.34	108.40	2,6000	.001
Grades 5 to 6	2.55			
Grades 7 to 8	2.70			
Low IQ	2.41	37.77	2,6000	.001
Medium IQ	2.54			
High IQ	2.64			
Boys	2.53	5.50	1,6000	n.s.
Girls	2.53			

Note: No significant interactions.

[a] The higher the score, the greater the consistency.

A similar tendency to minimize party differences may be noted in response to questions asking about the stands which the political parties do take on issues. Table 37 presents what was intended as an index of the ability to differentiate between the two political parties. Contrary to the prediction of increased *differentiation* with grade, there was, in fact, an increase with grade (significant at the .001 level) and with intelligence (also $p <$ than .001) in the belief that both parties do the same things, a *lack of differentiation*. This may be due in part to the selection of issues on which party differences were assessed, the majority being such traditionally non-partisan matters as keeping the United States out of war. In any case, the results suggest that the phenomenon of partisanship is not a simple one. Development in this attitude-concept system progresses along the structural dimension from no knowledge about parties to the acquisition of affiliation simultaneously with progress along a content dimension from partisanship to independence.

The increase by grade in political independence and in the perception that both parties accomplish the same objectives also complicates the expected consistent relationship between partisan affiliation and perception that one's own party proposes more constructive policies. Table 38 presents the analysis of variance of Consistency between Parties' Stands and Affiliation. There was no significant change by grade in this *consistency*. The F ratio associated with the IQ effect was significant at the .01 level, with the high IQ group demonstrating greater *consistency*. The sex difference was not significant. This structural dimension of consistency does not develop with grade although the ability to reduce inconsistency is increased somewhat by high intelligence.

This type of consistency must also be evaluated realizing that even on traditionally partisan issues children do not see the type of issue differences between the parties that adult perceive. For example, less than 13 per cent of

TABLE 37

ANALYSIS OF VARIANCE OF PARTY NON-DIFFERENTIATION, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects			
	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 4 Grades 5 to 6 Grades 7 to 8	3.46 3.84 3.92	12.80	2,5251	.001
Low IQ Medium IQ High IQ	3.35 3.81 4.07	29.42	2,5251	.001
Boys Girls	3.66 3.82	25.12	1,5251	.001

	Interaction Between Grade and IQ[b,c]		
	Low IQ	Medium IQ	High IQ
Grade 4 Grades 5 to 6 Grades 7 to 8	2.79 3.41 3.83	3.56 3.86 4.01	4.04 4.25 3.92

[a] Mean number of responses, "Both parties about equal."

[b] Significant, $p < .001$.

[c] At Grades 7 to 8 the largest number of "Both equal" responses is given by middle IQ group.

TABLE 38

ANALYSIS OF VARIANCE OF CONSISTENCY OF PARTY AFFILIATION AND PARTY STANDS, BY GRADE, INTELLIGENCE, AND SEX

Group	Main Effects Means[a]	F Ratio for Main Effect	df	p <
Grade 4	2.43	2.62	2,5251	n.s.
Grades 5 to 6	2.48			
Grades 7 to 8	2.49			
Low IQ	2.43	6.54	2,5251	.01
Medium IQ	2.47			
High IQ	2.51			
Boys	2.44	5.43	1,5251	n.s.
Girls	2.49			

Note: No significant interactions.

[a] The higher the score, the greater the consistency.

children in all grades answered both that the Democrats do more for working people and the Republicans do more for rich people.

In a third area, the consistency of norms of adult partisanship (whether an adult should always vote for the candidate proposed by his party or whether he should vote for the "best man") with the child's perception of whether he himself was a partisan or an independent was determined. The percentage of those who were scored Consistent and those scored Inconsistent by this criterion (see Chapter II) did not change with age. This developmental trend was not tested with analysis of variance because only a dichotomous distinction was made; it was evaluated by a test for trend in percentages using Chi-square and was not significant. The sex difference in consistency was not significant (also tested by Chi-square).

Because the question inquiring about norms of ideal partisan commitment was stated in terms of adult voting behavior while the question inquiring about the child's own affiliation asked about orientation toward party in more general terms, it was decided to examine a typology of relationships between norms and affiliation (Table 39). The percentage of children who endorsed the norm that adults should vote for the "best man" (rather than always voting for their party's candidate) was much larger than the percentage who said they would be "sometimes Democrat and sometimes Republican" if they could vote. It appears that the norm that adults should vote "independently" is acquired before one ascribes to an "independent" status in one's own projected vote. Holding this norm about adult behavior in judging candidates on their merit while still feeling committed to a party may not really be inconsistent; the data generally support this contention. The percentage of those who endorsed the norm that adults should vote in a partisan manner and who also said that they themselves were partisan declined during the elementary grades.

TABLE 39

DEVELOPMENT OF NORMS OF ADULT PARTISAN INDEPENDENCE AND ONE'S OWN PARTY AFFILIATION

Group	N	Norm Partisan--Self Partisan (%)	Norm Independent--Self Partisan (%)	Norm Independent--Self Independent (%)	Norm Partisan--Self Independent (%)
Grades 3 to 4	1729	40.54	38.17	14.69	6.59
Grades 5 to 6	2646	29.44	40.55	23.89	6.12
Grades 7 to 8	2714	21.08	43.26	30.99	4.68

The percentage of those who held the norm that adults over the long run should be independent but who themselves felt commitment to a party (at least for one vote) remained quite consistent over the elementary grades. Those who held the norm of adult independence and also reported their own affiliation as independent increased markedly. Apparently the norm about adult behavior is acquired before the child brings his own affiliation into line, and the stage where the norm of independence has been acquired but a partisan affiliation is still held may be an intermediate stage; it is not necessarily inconsistent. Actually the only type of response for these items which would be inconsistent would be to believe that adults should be partisan all of the time and to think of oneself as independent. Less than 7 per cent of the group at all grade levels fell into this category. Apparently children adopt one norm about long-run voting behavior for adults but may express another sentiment in their own projected affiliation. As they grow older their own affiliation becomes congruent with this norm; some of this progression does appear to occur during the elementary school years.

In charting the content and structure of the development of political partisanship, the first stage to be observed is the lack of extensive attitudes or beliefs about parties. In the second phase the child's own partisan identification develops, along with some partisan reactions to election outcomes which favor his own party. There is some structural development in the sense that these affiliations and reactions become both more stable and more consistent with each other. There is no concurrent increase in the recognition of issue conflict between parties or in the belief that one's own party proposes better solutions for national problems. At least in the population tested there is at this stage a gradual increase in the belief that adults should be independent of partisan commitment. Around this norm of behavior a non-partisan orientation begins to develop.

The findings concerning structural development in the partisanship attitude-concept system enrich the understanding of partisanship derived from a study of content alone. These results point to the importance of determining the extensiveness of children's knowledge and attitudes, because political parties are quite unknown objects to many young children. The increase by grade in the stability of a child's affiliation and in his responses to the election along with the increase in consistency between these two elements point to the two most relevant aspects of partisanship for young children--I am a Democrat (or a Republican) and I am glad (or sorry) that this candidate won the election. Consistency of Affiliation with Image of Parties' Stands, as well as Stability of Image of Parties' Stands, showed no increase during the elementary grades. In fact, with increasing grade children showed less ability to differentiate between the parties on the basis of their stands on issues. Perceptions of partisan conflict over issues is not a particularly salient aspect of children's political attitudes.

The Relationship Between Selected Structural Dimensions and Political Involvement

Question 6: How does attitude structure differ for children with varying amounts of political interest and involvement?

> Hypothesis 6A: Attitude-concept systems will be more extensive for children who have high political involvement.
>
> Hypothesis 6B: Attitude-concept systems will be more stable for children who have high political involvement.
>
> Hypothesis 6C: The elements of the political party attitude-concept system will be more consistent for children who have high political involvement.

Since both the structural dimensions and the index of political involvement (interest, activities, and discussion) were associated with grade and with intelligence, their relationship with each other could not be tested as a simple main effect in an analysis of variance. It was decided to scan the relationship of attitude structure to political involvement by computing partial correlations between the Political Involvement Score and the structural variables (within grade and partialing out IQ). In those cases where these partial correlations were clearly not significant at any grade level, no further analysis was attempted. Where the correlations were consistent and highly significant this information has been presented as evidence of the relationship between political involvement and the given structural dimension. In cases where the relationship was equivocal--reaching significance at one grade level but not at another--a variation of the three-way analysis of variance was conducted. The available program (Manova) allows an ordering of variables to eliminate the effects of two variables and determines the effect of a third. For this analysis the effects of grade and intelligence were eliminated to assess the effect of political involvement.

The most striking relationship revealed by these correlations was between political involvement and extensiveness. All of the Don't Know Scores were correlated significantly with the Political Involvement Score ($p < .001$) at all grade levels (with IQ partialed out). These partial correlations are presented in Table 40. An increase in the extensiveness of attitude-concept systems is associated with increases in political interest, participation in political activities, and in political discussion.

TABLE 40

CORRELATIONS BY GRADE BETWEEN POLITICAL INVOLVEMENT AND EXTENSIVENESS WITH IQ PARTIALED OUT

Correlation	Grades 3 to 4			Grades 5 to 6			Grades 7 to 8		
	N	r	p <	N	r	p <	N	r	p <
Image of Parties' Stands DK	1231	-.23	.001	3072	-.25	.001	3009	-.19	.001
General Party DK	1231	-.27	.001	3072	-.28	.001	3009	-.21	.001
Efficacy DK	1231	-.22	.001	3072	-.25	.001	3009	-.17	.001
Influence DK	1231	-.17	.001	3072	-.19	.001	3009	-.12	.001
Concept of Democracy DK	1231	-.21	.001	3072	-.28	.001	3009	-.18	.001
Total DK	1231	-.30	.001	3072	-.34	.001	3009	-.27	.001

Note: The correlations in this table are negative because higher numbers of DK scores correspond to less extensive attitudes.

Partial correlations between Political Involvement and Stability Scores in the following political attitude areas--Efficacy, Image of Parties' Stands, Concept of Democracy, Influence on Government--were not significant at any grade level and were not analyzed further. Partial correlations between Political Involvement and the Policeman and President Instability Scores were significant at some grade levels and approached significance at others. These variables (along with Father Instability for comparison) were included in an analysis of variance eliminating effects of grade and intelligence. F-ratios associated with the Political Involvement effect were significant at the .01 level for Policeman Instability and President Instability, with those who were more politically sophisticated demonstrating less instability. The relationship with Political Involvement was not significant for the Father Instability Score (Table 41). Children who have high political interest, participate in political discussion, and are politically active do differ along structural dimensions--in this case having more stable attitude-concept systems for non-family political figures.

Partial correlations between Political Maturity and the Differentiation and Consistency of Political Partisanship were also equivocal, leading to an analysis of variance whose results are presented in Table 42. Political Involvement was related to Party-Non-differentiation at the .001 level, in the direction opposite to the relationship of grade and intelligence to this variable. Children with high political interest and participation saw more differences between the political parties than children with less involvement. Although older and brighter children had responded that there were fewer differences between the parties (see Table 37), children of high political involvement (usually themselves older and brighter) perceived more partisan differentiation. This finding indicates the particular relevance of political interest and activity for the development of attitudes toward political parties. It suggests that children with high interest form a special group and do not simply absorb from the school curriculum the belief that the parties are the same. Rather this group becomes truly politicized--perceiving conflicts and differences between the political parties which are usually seen only by adults.

TABLE 41

ANALYSIS OF VARIANCE OF THREE INSTABILITY SCORES BY POLITICAL INVOLVEMENT (ELIMINATING EFFECTS OF INTELLIGENCE AND GRADE)

	Political Involvement Main Effect Means[a]	F Ratio for Political Involvement	df	p<
President Instability				
Low Political Involvement	4.32	5.16	2,535	.01
Medium Political Involvement	3.69			
High Political Involvement	3.62			
Policeman Instability				
Low Political Involvement	4.91	5.92	2,535	.01
Medium Political Involvement	4.20			
High Political Involvement	4.19			
Father Instability				
Low Political Involvement	3.28	1.63	1,535	n.s.
Medium Political Involvement	2.83			
High Political Involvement	2.97			

Note: No significant interactions.

[a] Sum of absolute values of differences between response on Test 1 and Test 2 for six questions.

TABLE 42

ANALYSIS OF VARIANCE OF PARTISAN DIFFERENTIATION AND CONSISTENCY BY POLITICAL INVOLVEMENT (ELIMINATING EFFECTS OF INTELLIGENCE AND GRADE)

	Political Involvement Main Effect Means[a]	F Ratio for Political Involvement	df	p<
Party Non-differentiation				
Low Political Involvement	3.97			
Medium Political Involvement	4.01	6.98	2,4668	.001
High Political Involvement	3.74			
Consistency Image of Parties' Stands and Affiliation				
Low Political Involvement	2.45			
Medium Political Involvement	2.48	6.34	2,4668	.01
High Political Involvement	2.51			
Consistency Election and Affiliation				
Low Political Involvement	2.55			
Medium Political Involvement	2.65	15.61	2,4668	.001
High Political Involvement	2.68			

Note: No significant interactions with Political Involvement.

Children with high political interest and participation also expressed reactions to elections which were more consistent with their partisanship ($p < .001$). A child of any grade who is interested in political matters is more likely to develop a partisan affiliation which is ego relevant and is more likely to become involved in election campaigns in the direction consistent with his affiliation.

The relationship between Consistency of Affiliation and Image of Parties' Stands and Political Involvement, also documented by Table 42, is even more striking because of the lack of relationship noted previously between grade and this score. Apparently consistency in perceiving that one's own party proposes better policies is not something which develops in children during elementary school but rather something which demands a particular kind of child—one who is interested and involved in political matters.

In summary, the more extensive attitude-concept systems, increased stability of attitudes toward political figures, and orientations to political parties which differentiate between their policies and are consistent are all part of the growth of political involvement during elementary school. Structural dimensions in the political party attitude-concept systems in particular are related to this political involvement, even when there is not relationship between the structural dimensions and grade or intelligence (or when this relationship is in the opposite direction). This suggests that children of high political maturity form a small group with special characteristics. Their political party attitudes, which are like those of adults, have not simply developed with progression through the grades but have been strongly influenced by their high level of general political interest and participation.

CHAPTER IV

SUMMARY

Problem

Structural (non-content) dimensions of children's political attitudes and their development were investigated using new methods derived from self-report data. Experience with the limited models and methods available for studying children's attitudes led to the choice of this research problem. Even studies of adults have not dealt with all of the ramifications of attitude organization and change; the relationship between attitude components as well as other characteristics of attitude unrelated to content have been ignored for the most part. Persistent problems with self-report data in studies of adult attitudes have also been magnified in studies of children. An investigation of the political attitudes of elementary school children is particularly appropriate for assessing development in the structural aspects of attitudes related to cognitive growth and to the accumulation of experience.

The construct "attitude-concept system" was introduced to designate evaluations of an attitude object and beliefs associated with this evaluation. Five structural dimensions were chosen for study: extensiveness or the number of attitudes a child can express, the consistency between evaluations of an attitude object and beliefs about that object, attribute differentiation or the independence of judgments of personal affection from judgments of role performance and power, object differentiation or the ability to differentiate between political and family authority figures on affective qualities, and the stability of attitude responses. These dimensions were selected because they had been included in studies of non-content dimensions of attitudes in adults and adolescents (French, 1947; Smith, Bruner, and White, 1956; Key, 1961; Wilson, 1963) and because they could be related to recent formulations of cognitive structure (Scott, 1963) and of cognitive development (Kohlberg, 1961; Kohlberg, 1965). Each individual was given a derived variable score on these structural dimensions to indicate the relationships between his responses rather than the content of his responses.

The analysis was designed to answer five general questions important for research in children's attitudes. First, what are the characteristics of these structural dimensions? Are they generalized across different attitude areas? To what degree is an attitude-concept system structured along all structural dimensions in a unitary fashion? What kinds of experience with an attitude object increase the structure of an attitude-concept system? Second, does development along structural dimensions occur during the elementary school years? Third, how does attitude structure differ between groups of children categorized by intelligence, by sex, and by political interest? Fourth, what information can be gained about the development of a particular content area of political attitude from a study of non-content dimensions? Fifth, how can the measurement of children's attitudes be improved by the use of derived measures of structural dimensions?

The following specific questions and related hypotheses were considered:

Question 1: How general are structural dimensions across different attitude areas:

Question 1A: What is the relationship between the same structural dimension in different attitude-concept systems?

Question 1B: What is the relationship between different structural dimensions within an attitude concept system?

Question 2: Does the process of formulating answers to questions concerning an attitude object increase the structure of the corresponding attitude-concept system? Is this an aspect of the process by which attitudes become more structured?

Hypothesis 2: Experience gained from responding to an attitude instrument will increase the structure of attitudes expressed on a second administration of the same instrument.

Question 3: What is the relationship of structural dimensions to school grade? Does development occur in attitude structure during the elementary school years?

Hypothesis 3A: Attitude-concept systems will be more extensive for children of higher grade levels.

Hypothesis 3B: Attitude-concept systems will be more stable for children of higher grade levels.

Hypothesis 3C: The objects around which attitude-concept systems are oriented will be more differentiated for children of higher grade levels.

Hypothesis 3D: In judgments of persons and social objects, where group identification is not important (e.g., ratings of policeman and President), the differentiation of role and power attributes will be greater for children of higher grade levels. In judgments of the father, where the affective relationship remains primary, attribute differentiation will not be greater for children of higher grade levels.

Hypothesis 3E: In attitude areas where identification with a group is important (e.g., political party) the elements of attitude-concept systems will be more consistent for children of higher grade levels.

Question 4: How does attitude structure differ for children of high and low intelligence (with grade held constant)?

Hypothesis 4A: Attitude-concept systems will be more extensive for children with higher IQ's.

Hypothesis 4B: Attitude-concept systems will be more stable for children with higher IQ's.

Hypothesis 4C: The objects around which attitude-concept systems are oriented will be more differentiated for children with higher IQ's.

Hypothesis 4D: In judgments of persons and social objects where group identification is not important (e.g., ratings of policeman and President), the differentiation of role and power attributes from affiliation will be greater for children with higher IQ's. In judgments of the father attribute differentiation will not vary with IQ.

Hypothesis 4E: In attitude areas where identification with a group is important (e.g., political party) the elements of attitude-concept systems will be more consistent for children with higher IQ's.

Question 5: How does attitude structure differ for boys and girls?

Hypothesis 5A: Boys will have more extensive attitude-concept systems than girls.

Hypothesis 5B: Girls will have more stable attitude-concept systems than boys.

Hypothesis 5C: The objects around which attitude-concept systems are oriented will be more differentiated for boys.

Hypothesis 5D: In judgments of persons and social objects, where group identification is not important (e.g., ratings of policeman, President, and father) the differentiation of role and power attributes from affiliation will be greater for boys.

Hypothesis 5E: In attitude areas where identification with a group is important (e.g., political party) the elements of attitude-concept systems will be more consistent for girls.

Question 6: How does attitude structure differ for children with varying amounts of political interest and involvement?

Hypothesis 6A: Attitude-concept systems will be more extensive for children who have high political involvement.

Hypothesis 6B: Attitude-concept systems will be more stable for children who have high political involvement.

Hypothesis 6C: The elements of the political party attitude-concept system will be more consistent for children who have high political involvement.

Method

Prior to this research, hour-long questionnaires concerning political attitudes had been obtained from approximately twelve thousand children, Grades 2 through 8. These data had been collected for a study of political socialization in the elementary school (Cooperative Office of Education Grant No. 1078) in eight United States cities. A subgroup of 1,158 children had repeated the questionnaire four to fourteen days after the first administration.

Because the data for this research had been collected in classroom groups, there were advantages to the use of school grade rather than age as the major developmental indicator. Approximately equal numbers of children had been tested at each grade level, and the questionnaire had been administered in three forms so that the information available for any child was determined by his grade level.

Intelligence test scores had been coded from the school files and converted into a common stanine scale for 84 per cent of the tested group. Indices of political interest, participation in political discussion, and political activities were chosen from the questionnaire to form the measure of political involvement.

Political Parties, Democracy and Processes of Influence, and Political and Family Authority Figures were chosen as the attitude-concept content areas in which structural development would be assessed. Both theoretical considerations and the availability of questions of a similar format where the "Don't Know" option had been included were important in the decision to concentrate on these topics.

Product-moment correlations were used to evaluate the relationship between structural dimensions. Three-way analysis of variance was used to test variations of the structural dimensions by grade, IQ, and sex, and variations by political involvement eliminating the effects of grade and IQ.

Scores on the five dimensions were obtained as follows:

1. Extensiveness.--The number of attitudes a child was able to express was designated a measure of the extensiveness of his attitude-concept systems. The number of "Don't Know" responses to a specified set of items was used as a measure of this dimension (smaller number of DK's corresponding to more extensive attitudes). DK subscores in five different content areas were calculated.

2. Consistency.--Consistency was assessed by responses in a content area which implied the same direction of concern, particularly consistency

between evaluations and beliefs about the same attitude object. This was an especially important structural dimension for understanding political partisanship, where ego-involvement and group identification are crucial. For example, a child who claimed a Democratic partisan affiliation was scored consistent if his image of the Democratic party's stands on issues was more favorable than his image of the Republicans' stands; a Democratic child was consistent if his response to the election of a Democratic candidate in 1960 was positive.

3. Attribute differentiation.--This dimension was defined generally as tolerance for some inconsistency between evaluations and beliefs when dealing with topics which are less ego-involving than political party identification. Specifically, attribute differentiation referred to the ability to perceive the positive role or power qualities of political authority figures without personal attachment to these figures. The higher the differentiation of role and affiliation in rating the President, for example, the more positive the rating of the role performance of the President relative to the rating of personal feeling for him.

4. Object differentiation.--This dimension refers generally to the ability to make distinctions between family and non-family authority figures, reversing the process of generalization which is assumed to be of importance in the formation of attitudes toward distant figures. The ability to differentiate the particular role of the father as a source of affiliative gratification was assessed by the signed difference between the rating given to father and the rating given to the President on the scales "would always want to help me" and "is my favorite." The ability to differentiate between the policies of the political parties was assessed by the choice of the alternative "both (parties) about the same" in response to the questions designated as Image of Parties' Stands.

5. Stability.--The stability of attitudinal response across a test-retest interval was an important index of the degree of attitude crystallization. It was assessed by counting the number of items to which an individual had given the same response on the two administrations or by summing the absolute values of the difference between the scaled responses on Test 1 and that on Test 2.

Results

The results are summarized in Table 43.

Relationships Between Dimensions

Relationships between different dimensions within a single attitude-concept system and between the same dimension in different attitude-concept systems were investigated to determine the generality of these dimensions for purposes of measurement and to indicate whether structure is a unitary characteristic of an attitude-concept system.

1. The extensiveness of attitudes (measured by absence of "Don't Know" responses) was highly correlated across the three attitude-concept systems, indicating the generality of this dimension.

2. The stability of attitudinal responses in different content areas was correlated over individuals at a significant but not high level, indicating that stability is more specific to content area.

3. There was a curvilinear relationship between attitude extensiveness and stability. "Don't Know" responses demonstrated greater stability on retest than content responses, indicating the importance of distinguishing the type of response when evaluating the stability of response.

4. The consistency of partisan attitudes was associated with the stability of partisan attitudes at a significant but not high level, indicating

TABLE 43

SUMMARY OF RESULTS

	Question 1		Question 2
	Relation to Same Dimension in Different Content Area or for Different Figures or Dimensions	Relation to Different Dimension in Same Content Area	Increase with Test Taking Experience
Figures			
Stability			
Father	Correlated to other figures	***	***
Policeman	Correlations highest between these two figures	***	
President		***	
All non-family	***	***	***
Object Differentiation (between Father and President)			
Favorite	Correlated with each other	***	Second test higher
Help		***	Second test higher
Attribute differentiation			
Father	Correlated with other figures	***	Second test higher (power only)

TABLE 43--Continued

Question 3	Question 4	Question 5	Question 6
Development, Indexed by Grade	Development, Indexed by Intelligence	Sex Differences	Relation to Political Involvement
High grade, higher stability	High IQ, higher stability	No difference	No relationship
High grade, higher stability	High IQ, higher stability	No difference	High political involvement, higher stability
High grade, higher stability	High IQ, higher stability	No difference	High political involvement, higher stability
High grade, higher stability	High IQ, higher stability	No difference	No relationship
High grade, greater differentiation	High IQ, greater differentiation	Boys greater differentiation	***
High grade, greater differentiation	High IQ, greater differentiation	No difference	***
High grade, higher differentiation	No difference	Girls higher differentiation (power only)	***

TABLE 43--Continued

	Question 1		Question 2
	Relation to Same Dimension in Different Content Area or for Different Figures or Dimensions	Relation to Different Dimension in Same Content Area	Increase with Test Taking Experience
Policeman	Correlation highest between these two figures	***	Second test higher (power only)
President		***	Second test higher
Political Parties			
Extensiveness	DK parties' stand and DK general party very highly correlated	Curvilinear relationship between DK and stability	No difference
Stability			
Parties' stands	Significant but low correlations		***
Own affiliation		Correlated to both consist.	***
Differentiation	***	Non-differ. response more stable	***
Consistency			
Election	***	Correlated significantly with each other	Second test higher
Image of Parties' Stands	***		No difference

TABLE 43--Continued

Question 3	Question 4	Question 5	Question 6
Development, Indexed by Grade	Development, Indexed by Intelligence	Sex Differences	Relation to Political Involvement
High grade, higher differentiation	High IQ, higher differentiation	Boys higher differentiation (power only)	***
High grade, higher differentiation (role only)	High IQ, higher differentiation	No difference	***
High grade, higher extensiveness	High IQ, higher extensiveness	Boys higher extensiveness	High political involvement, higher extensiveness
No difference	No difference	No difference	No relationship
High grade, higher stability	No difference	No difference	No relationship
High grade, lower differentiation	High IQ, lower differentiation	Girls lower differentiation	High political involvement, higher differentiation
High grade, higher consistency	High IQ, higher consistency	No difference	High political involvement, higher consistency
No difference	High IQ, higher consistency	No difference	High political involvement, higher consist.

TABLE 43--Continued

	Question 1		Question 2
	Relation to Same Dimension in Different Content Area or for Different Figures or Dimensions	Relation to Different Dimension in Same Content Area	Increase with Test Taking Experience
Norms	***	***	***
Efficacy, Influence, and Democracy			
Extensiveness			
Influence	Highly correlated to all other DK	Curvilinear relationship between DK and stability	No difference
Efficacy			Second test lower
Concept of Democracy			No difference
Stability			
Influence	Significant but low correlations	Curvilinear relationship between DK and stability	***
Efficacy			***
Concept of Democracy			***

Note: "No difference" indicates that the relationship was tested and found not significant. The symbol "***" indicates that relationship was not tested or that correlation was inappropriate because of some artifactual relationship between scores.

TABLE 43--Continued

Question 3	Question 4	Question 5	Question 6
Development, Indexed by Grade	Development, Indexed by Intelligence	Sex Differences	Relation to Political Involvement
Norms acquired before affiliation independent	***	No difference	***
High grade, higher extensiveness	High IQ, higher extensiveness	No difference	High political involvement, higher extensiveness
High grade, higher extensiveness	High IQ, higher extensiveness	Boys higher extensiveness	High political involvement, higher extensiveness
High grade, higher extensiveness	High IQ, higher extensiveness	Boys higher extensiveness	High political involvement, higher extensiveness
No difference	No difference	No difference	No relationship
High grade, higher stability	High IQ, higher stability	No difference	No relationship
High grade, higher stability	No difference	No difference	No relationship

that an individual with highly structured partisan attitudes on one dimension will be somewhat more likely to show greater structure on other dimensions.

5. Structural scores based on sub-areas of the Democracy-Influence attitude-concept system were not significantly correlated with each other, indicating a lack of unitary structural organization within this attitude area.

6. In attitudes toward political and family authority figures, the correlations of Instability Scores and Attribute Differentiation Scores were higher between President and policeman than between father and either of the non-family figures. These results indicate that there is some generality to the dimensions of stability and differentiation when applied to judgments of non-family authority figures and that this attitude-concept system possesses a unitary structure along these two dimensions.

Structure and Test Taking Experience

The crystallization of attitudes which may result from experience in answering attitude questions was assessed by comparing the mean structural scores on Test 1 and Test 2.

1. Object Differentiation, Attribute Differentiation, and the Consistency between Partisan Affiliation and Election Response were higher on the second testing, indicating that taking a test increases the structure of attitudes assessed by it.

Relationship to Grade

The relationship of structural dimensions to grade was used to determine whether development occurs along these dimensions during elementary school.

1. All measures of structural dimensions of attitude-concept systems were higher for students at higher grade levels, with the exception of Party

Differentiation (where the effect was significant in the opposite direction) and Differentiation of Power/Affiliation for President, Stability of Parties' Stands, Stability of Influence, and Consistency of Affiliation with Image of Parties' Stands (all of which showed no differences). Attribute Differentiation for Father--which was expected not to increase with grade--did increase.

Relationship to Intelligence

The attitude structure of more intelligent children was compared with that of less intelligent children.

1. All measures of structural dimensions of attitude-concept systems were related to intelligence in the predicted direction, with the exception of Stability of Parties' Stands, Stability of Own Party Affiliation, Stability of Concept of Democracy, and Stability of Influence. Differentiation of Role/Affiliation for Father and Differentiation of Power/Affiliation for Father, as predicted, were not related to intelligence.

Sex Differences

The attitude structure of boys and girls was compared.

1. Boys had more extensive political attitudes than girls in every content area tested except influence. This difference was less pronounced at higher grade levels.

2. Boys also showed more ability than girls to differentiate between father and President on the dimension "is my favorite." Object differentiation on the item "would always want to help me" showed no sex differences. The sexes apparently differ in the importance of generalization as a process of attitude development.

3. When compared with boys, girls scored lower on Differentiation of Power/Affiliation for Policeman, as predicted. Contrary to predictions, girls

scored higher on Differentiation of Power/Affiliation for Father. This indicates the relevance of the power and affiliation dimensions for distinguishing between the sexes.

4. Girls showed less ability than boys to perceive conflict between the political parties, revealing their tendency to project desires for non-conflict upon the political world.

Political Involvement and Structure

The attitude structure of children with high and low political interest and involvement was compared. This analysis was performed to determine whether high salience of a general attitude area (in this case politics) increases the structure of specific attitude-concept systems.

1. All Extensiveness Scores were related to Political Involvement, suggesting that this structural dimension is a politicized one where interest and participation increase the number of attitudes a child expresses.

2. Political Involvement was related to the stability of attitudes toward policeman and President (but not of attitudes toward the father).

3. Political Involvement was related to the ability to differentiate between political parties, to the consistency of one's party affiliation with one's reactions to elections, and to the consistency of affiliation and perception of the issue stands taken by the parties. These results were striking because the relationships were stronger than, or in the opposite direction from, the relationship between these partisan variables and grade (and intelligence). Political involvement is apparently particularly important for the acquisition of adult-like attitudes toward political parties.

Conclusions

The Characteristics of Structural Dimensions

It is necessary to understand the generality of the structural dimensions defined and investigated in this research in order to judge their meaning and relevance. The dimension of extensiveness is highly general across different content areas in the realm of political attitudes. Children who have extensive attitudes in one content area also have extensive attitudes in other areas. The dimension of stability is more specific to a particular content area.

There is little evidence for a unitary degree of structure along all dimensions of a single attitude-concept system. This suggests that no single factor, like amount of information, accounts for the existence of a given amount of structure. From the comparison of attitude structure on the first and second test administrations, it appears that answering questions about an attitude object does increase the crystallization of that attitude. This effect may be accentuated in this research because children's political attitudes possess minimal structure; the focusing of attention upon any area where information and opinions are uncertain is likely to produce more marked changes than focusing of attention on a familiar topic.

The Development of Structural Dimensions During Elementary School

The dimensions of extensiveness, object differentiation, attribute differentiation, consistency of partisanship, and stability all show greater structure in the attitudes of older children. Development cannot be understood solely by assessing the content of attitudes, which may not change, but must take into account the non-content dimensions defined in this research. Theories of attitude development must consider cognitive development--changes in the organization and structure of thought. This is one of the major ways in which attitudes develop during childhood.

Correlates of Attitude Structure in Children

Children of high intelligence have more extensive attitudes, more consistent partisan attitudes, and more stable attitudes toward political figures. They are also more capable of differentiating between attitude objects and demonstrate greater ability to make judgments of the role performance and power of authority figures independent from their feelings of affection for these figures. The differences are in the same direction as the associations with grade discussed in the previous section. This is further evidence that differences in cognitive ability and cognitive structure are related to differences in the structure of attitudes.

Sex differences are primarily important on the dimensions of extensiveness of political attitudes and in object and attribute differentiation for judgments of family and non-family figures. Generalization is apparently of heightened importance in the formation of females' judgments of authority figures. Power and affiliation are psychological dimensions which are used differently by boys and girls in judging family and non-family figures. Girls are also less able than boys to differentiate between the policies of the political parties, revealing their tendency to project non-conflict upon the political world.

Differences between children with varying levels of political involvement are particularly pronounced in the stability of judgments of non-family figures, in the extensiveness of political attitude-concept systems, and in the differentiated and consistent nature of attitudes toward political parties. Strong and consistent partisanship is unusual in children and apparently develops only in those who have great amounts of commitment, participation, and interest in politics. The greater salience of politics for some children produces a high level of political attitude structure.

Structural Dimensions of Particular Attitude-Concept Systems

Although structural dimensions are independent of content, they make a significant contribution to understanding the nature and development of particular content areas of political attitudes. This is particularly true for political partisanship. Simultaneous development along all structural dimensions does not occur in this attitude-concept system, nor are those changes which do take place during elementary school oriented unidirectionally toward political attitudes characteristic of adults. Three out of five of the derived structural measures which did not show a relationship to grade level concerned the political party attitude-concept system.

One of the major steps in the development of partisanship does seem to be the acquisition of a stable partisan affiliation and achievement of consistency between one's affiliation and one's reactions to elections as political events. During this same period, however, norms are acquired which support political independence rather than whole-hearted partisanship. Beliefs that the parties do not really differ in their proposed policies are assimilated; finally the child is likely to assume an independent partisan affiliation for himself. These two lines of development--toward consistent partisanship and toward partisan independence--make it difficult to designate the orientation which is most structured or mature. This difficulty is increased because this sequence diverges from the political parties attitudes which have been reported in adults. The relationship of structural dimensions of partisanship to political involvement suggests that development in this attitude-concept system requires an unusual amount of political interest and active political involvement.

For the attitude-concept system surrounding Democracy, Influence, and Efficacy, there is some evidence that structural development occurs. There is no evidence, however, for the existence of a single attitude-concept system with beliefs oriented around each sub-area which also bear strong relationships to each other. Extensiveness appears to be an especially important dimension of concepts and attitudes concerning Democracy and Influence.

In judging authority figures, the distinction between family and non-family figures seems a particularly important one. There is a structure in the judgment of non-family figures which possesses some unity. Stability and attribute differentiation are relevant dimensions of these systems. Structural development in the attitude-concept systems surrounding these figures appears to be completed for many children by Grade 6, in contrast to the area of political partisanship where considerably less structural development occurs during the early elementary grades. There are sex differences particularly with reference to the power and affiliation dimensions.

Derived Variables, Structural Dimensions, and Measurement

Derived variables are useful measures of individual differences in attitude structure. Using data other than attitude content, these variables provide extensive information about the organization of attitude elements within an individual (information usually available only for groups of individuals).

The results of this research also have more general implications for designing studies of children's attitudes. First, one must specify the component beliefs and evaluations and their organization within the attitude-concept system to be studied. If there is some type of criterion group (in this case politically informed adults), the attitude-concept system which characterizes them should be understood. Splitting an attitude area into its component beliefs and evaluations and producing measures of each on comparable scales has been used previously only in some studies of prejudice; it is necessary if one is to investigate structural relationships thoroughly. Beliefs and attitudes should be measured with the greatest possible isomorphism between question and piece of information sought. The instrument should allow accurate assessments of the consistency of attitudes and the differentiation of objects and attributes by making rating scales for different evaluations and beliefs, for different figures, and for different attributes as equivalent as possible.

The importance of extensiveness as a dimension independent from all content dimensions has implications both for the type of question to be used in an instrument and for the specific nature of rating scales. It is crucial to include a "Don't Know" option when assessing attitude areas that may be unfamiliar to a child respondent. The curvilinear relationship between "Don't Know" and Stability, along with the relationship between the response "Both parties do the same" and Stability, indicates the importance of evaluating the kind of response which is stable when assessing test-retest reliability.

A final suggestion for test construction concerns the dimensions for judging figures which should be included in studies of attitudes toward authority. Sex differences, as well as developmental changes, suggest that at least the three dimensions--role, affiliation, and power--are vital for understanding these attitudes. These characteristics should be assessed on as wide a range of family and non-family figures as possible.

General Conclusions

The results of the research support the importance of structural (non-content) dimensions of attitude-concept systems for understanding children's social attitudes. These are dimensions along which attitude development occurs during elementary school. The usefulness of derived-variable measures of these dimensions has also been demonstrated. The type of structural organization which exists in three political attitude areas has been delineated, and the attitude structure of groups which differ by intelligence, by sex, and by political involvement has been compared. Finally, suggestions have been made for improving measurement in attitude research with children.

APPENDIX A

ITEMS USED IN SCORING DERIVED VARIABLES

Image of Parties' Stands Items

Here are some "guess who" questions about the Republicans and the Democrats. Put an X in the box beside each question to show your guess.

Guess who:

1. Does more for the rich people. (Choose one.)
    - (1) ______ Republicans.
    - (2) ______ Democrats.
    - (3) ______ Both about the same.
    - (4) ______ Don't know.
2. Does most to keep us out of war. (Choose one.)
3. Does most to help people who are out of work. (Choose one.)
4. Does more to protect the rights of citizens. (Choose one.)
5. Does more to help my family. (Choose one.)
6. Does more for the United States. (Choose one.)

(Alternatives for questions 2 through 6 same as alternatives for question 1)

General Attitudes Toward Party Items

1. How important do you think it is for grown-ups to belong to either the Republican or Democratic Party? (Choose one.)
    - (1) ______ Very important.
    - (2) ______ Important.
    - (3) ______ Not too important.

(4) ______ Not important at all.

(0) ______ I do not know or I have no opinion.

2. How much difference is there between the Democrats and the Republicans? (Choose one.)

(1) ______ A very big difference.

(2) ______ A big difference.

(3) ______ Some difference.

(4) ______ A very small difference.

(5) ______ No difference.

(0) ______ I do not know or I have no opinion.

3. Which of the following is the best citizen? Put an X beside the sentence that describes the best citizen.

(1) ______ He makes up his mind to be either a Democrat or a Republican and always votes the way his party does.

(2) ______ He doesn't join either the Democrats or the Republicans and votes for the man he thinks is best.

(0) ______ I don't know what the words Democrat and Republican mean.

4. It is better if young people belong to the same political party as their parents. (Choose one.)

(1) ______ Yes.

(2) ______ No.

(3) ______ Don't know.

5. If the Democrats and Republicans disagreed on important things: (circle the number that is closest to what you think would happen).

1	2	3	4	5	0
It would be very bad for the country	It would be bad for the country	It would not matter	It would be good for the country	It would be very good for the country	Don't know

Influence on the Government Items

How much do these people help decide which laws are made for our country: Very much, Some, Very Little, or Not at All? Put an X for each person or group of people listed below.

Rich people

1. (1) ☐ Very Much (2) ☐ Some (3) ☐ Very Little (4) ☐ Not at All (0) ○ Don't Know

2. Unions.

3. The President.

4. Newspapers

5. Churches

6. The Average Person.

7. Policeman.

8. Big Companies.

(Alternatives for questions 2 through 8 are same as alternatives for question 1)

Concept of Democracy Items

1. What is a democracy? (In each of the following questions, choose one.)

Is a democracy where the people rule?

(1) ______ Yes.

(2) ______ No.

(3) ______ I don't know.

2. Is a democracy where no one is very rich or very poor?

3. Is a democracy where all grown-ups can vote?

4. Is a democracy where everyone has an equal chance to get ahead?

5. Is a democracy where you can say anything against the government without getting into trouble?

6. Is a democracy where if most of the people agree, the rest should go along?

(Alternatives for questions 2 through 6
are same as alternatives for question 1)

Efficacy Items

1. What happens in the government will happen no matter what people do. It is like the weather, there is nothing people can do about it.

Don't Know
(1) ☐ YES (2) ☐ yes (3) ○ (4) ☐ no (5) ☐ NO
No Opinion

2. [a]There are some big powerful men in the government who are running the whole thing and they do not care about us ordinary people.

3. [a]My family doesn't have any say about what the government does.

4. [a]I don't think people in the government care much what people like my family think.

5. [a]Citizens don't have a chance to say what they think about running the government.

(Alternatives for questions 2 through 4
are same as alternatives for question 1)
a = Items Guttman scaled.

Additional Items Used in Total DK-Grade 3 and Total DK-Grade 4

1. The American flag is the best flag in the world.

Don't Know
(1) ☐ YES (2) ☐ yes (3) ○ (4) ☐ no (5) ☐ NO
No Opinion

2. All laws are fair.

3. America is the best country in the world.

4. People in other countries think their country is the best in the world.

5. Most laws were made a long time ago.

6. Voting is the only way that people like my mother and father can have any say about how the government runs things.

7. Sometimes I can't understand what goes on in the government.

8. It is all right for the government to lie to another country if the lie protects the American people.

9. I think that what goes on in the government is all for the best.

10. It is easy to get a law changed.

(Alternatives for questions 2 through 10 are same as alternatives for question 1)

Items Used to Measure Response to 1960 Election

When I heard Kennedy won the election over Nixon: (mark the one which is closest to the way you felt at that time).

1. ______ I was very happy.
2. ______ I was happy.
3. ______ I didn't much care one way or the other.
4. ______ I felt bad.
5. ______ I felt so bad I almost cried.

Items Used in Measure of Political Involvement

Interest

How much are you interested in reading or talking about current events, government, or other things going on in our country? (Choose one.)

1. ______ Very much.
2. ______ Some.
3. ______ Only a little.

Political Activities

1. I have worn a button for a candidate.

(1) ______ Yes.

(2) ______ No.

2. I have helped a candidate by doing things for him--such as handing out buttons and papers with his name on them.

3. I have read about a candidate in a newspaper or magazine.

(Alternatives for questions 2 and 3
are same as alternatives for question 1)

Participation in Political Discussion

1. I have talked with my mother or father about our country's problems.

   (1) ______ Yes.

   (2) ______ No.

2. I have talked with my friends about a candidate.

3. I have talked with my mother or father about a candidate.

(Alternatives for questions 2 and 3
are same as alternatives for question 1)

Rating Scales for Figures

	1	2	3	4	5	6
1[a]	Would always want to help me if I needed it	Would almost always want to help me if I needed it	Would usually want to help me if I needed it	Would sometimes want to help me if I needed it	Would seldom want to help me if I needed it	Would not usually want to help me if I needed it
2[a]	Makes important decisions all the time	Makes important decisions a lot of the time	Makes important decisions sometimes	Makes important decisions seldom	Almost never makes important decisions	Never makes important decisions
3[a]	Knows more than anyone	Knows more than most people	Knows more than many people	Knows less than many people	Knows less than most people	Knows less than anyone
4	Always keeps his promises	Almost always keeps his promises	Usually keeps his promises	Sometimes does not keep his promises	Usually does not keep his promises	Almost never keeps his promises
5	Can make anyone do what he wants	Can make almost anyone do what he wants	Can make many people do what he wants	Can make some people do what he wants	Can make a few people do what he wants	Can make Almost no one do what he wants
6	Is my favorite of all	Is almost my favorite of all	Is more a favorite of mine than most	Is more a favorite of mine than many	Is more a favorite of mine than a few	Is not one of my favorites

	1	2	3	4	5	6
7^a	Almost never makes mistakes	Rarely makes mistakes	Sometimes makes mistakes	Often makes mistakes	Usually makes mistakes	Almost always makes mistakes
8	Always a leader	Usually a leader	More often a leader than a follower	More often a follower than a leader	Usually a follower	Almost always a follower
9^a	Can punish anyone	Can punish almost anyone	Can punish many people	Can punish some people	Can punish a few people	Can punish no one
10	Works harder than almost anyone	Works harder than most people	Works harder than many people	Works less hard than many people	Works less hard than most people	Works less hard than almost anyone
11	I like him more than anyone	I like him more than most people	I like him more than many people	I like him more than some people	I like him more than a few people	I like him less than almost anyone
12	Protects me more than anyone	Protects me more than most do	Protects me more than many do	Protects me more than some do	Protects me less than some do	Protects me less than most do
13	Almost always gives up when things are hard to do	Usually gives up when things are hard to do	Sometimes gives up when things are hard to do	Usually does not give up when things are hard to do	Almost never gives up when things are hard to do	Never gives up when things are hard to do

All ratings on this and the preceding page made by fourth through eighth graders for President, policeman, and father. All ratings lettered "a" made by fourth through eighth graders for Senator, Supreme Court, Government.

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